

R E P O R T R E S U M E S

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DEVELOPMENT OF A NATIONAL REGISTER OF EDUCATIONAL RESEARCHERS.

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THE PRIMARY PURPOSE OF THE STUDY WAS THE DEVELOPMENT OF A NATIONAL REGISTER OF EDUCATIONAL RESEARCHERS. THE OBJECTIVES WERE (1) TO IDENTIFY THE POPULATION OF EDUCATIONAL RESEARCHERS IN THE UNITED STATES, (2) TO OBTAIN INFORMATION FROM THESE INDIVIDUALS ON THEIR PERSONAL LIFE, EDUCATIONAL HISTORY, PROFESSIONAL IDENTIFICATION, PROFESSIONAL EMPLOYMENT, RESEARCH AREAS, AND (3) TO PROCESS THE INFORMATION SO AS TO PERMIT A MULTIPLICITY OF USE. THE MAJOR PROCEDURAL STEPS WILL (1) DEVELOP A LIST OF 17,000 NAMES AND ADDRESSES OF EDUCATIONAL PERSONNEL USING PUBLISHED SOURCES AND DIRECT CONTACTS WITH RESEARCH ORGANIZATIONS, (2) DEVELOP A QUESTIONNAIRE AND NECESSARY ACCOMPANYING MATERIALS, (3) CIRCULATE 12,000 COPIES OF THE QUESTIONNAIRE, (4) SELECT THOSE INDIVIDUALS TO BE INCLUDED IN THE REGISTER, AND (5) PROCESS AND ANALYZE DATA FROM THE QUESTIONNAIRE. THE "PHI DELTA KAPPAN" WILL INCLUDE THE FIRST RESULTS OF THE STUDY. (HB)

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education

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DEVELOPMENT OF A NATIONAL REGISTER
OF EDUCATIONAL RESEARCHERS

Cooperative Research Project No. E - 014

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December 1, 1965

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Major advisors to the project included: David L. Clark and Ross L. Mooney of the College of Education, The Ohio State University, and Maynard Bemis, Stanley Elam, and Jules Harcourt of Phi Delta Kappa. In addition to the authors, personnel directly associated with the project included: Sharon Austin, Charles Blank, Michael Flory, Lennis Harris, Mildred Kilgrove, Donna Link, Michael Mooney, and Jerry Nichols. To these persons the authors extend a special note of appreciation.

Finally, many thanks are extended to the more than 6,600 individuals who responded to the National Register Questionnaire. The Register is dedicated to facilitating the professional research activities of these persons.

Robert R. Bargar
Egon G. Guba
Corahann Okorodudu

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CHAPTER I

OBJECTIVES AND PROCEDURES

INTRODUCTION

In recent years, increasing concern has been expressed relative to the status and future development of research in the field of education. The research through which the National Register of Educational Researchers has been developed was generated in response to such concern. In February of 1963, a proposal was submitted to the U. S. Office of Education entitled, "Individual Patterns in Educational Research: A Study of the Conditions Influencing the Development and Support of Educational Researchers in America." The major objective of this proposal was to study training patterns and professional activities as these influence the productivity of educational researchers. One of the major difficulties which the proposed project faced was that of identifying individuals who could be considered to be educational researchers. While ready professional sources exist through which individuals in other fields may be identified, no such source exists relative to educational researchers. From subsequent negotiations concerning the proposal, the suggestion emerged that the problem of identifying "educational researchers" ought to be tackled first, and that this might take the form of developing a national register of persons doing research in education. The project herein reported emerged through pursual of this suggestion.

2.

This report has been compiled in terms of several objectives:

1. To report the objectives and procedures involved in the study,
2. To report selected items of data concerning educational researchers, and
3. To suggest and illustrate ways in which Register data, may be used for professional purposes.

Relative to these objectives, the present chapter contains a discussion of objectives and procedures. Chapter II contains a description of the analysis undertaken and of the group of individuals involved in the analysis. Chapter III contains a discussion of frequency counts derived from categories of information for the entire group. Chapter IV contains a discussion of various ways in which Register data may be used, and includes presentations of results obtained from selected sub-group comparisons.

REVIEW OF PRESENT DIRECTORIES

Several directories now exist through which individuals in the field of education may be identified. Each of these directories, however, has certain limitations with respect to identifying educational research personnel. A discussion of these limitations will provide a useful framework within which to view the objectives of the National Register of Educational Researchers. For the purpose of the discussion, the directories to be reviewed are grouped as follows: commercially published directories which list educational personnel, and professional association directories and directories issued by governmental education agencies.

Commercially published directories dealing exclusively with educational personnel are:

Leaders in Education¹

Who's Who in American Education²

Patterson's American Education³

Other commercially published directories which occasionally list educational researchers are:

American Men of Science: Social and Behavioral Sciences⁴

Directory of American Scholars⁵

These directories can be criticized from several standpoints:

1. Access to Information. The information contained in these directories is listed with the names of individuals. No attempt is made to provide a system of cross referencing by which individuals may be identified along certain professional dimensions implied in the information, or by which the information can be used to provide statistical data concerning the field. The directories can be used conveniently in only one way: if information concerning a given individual is desired, such information can be found if the individual in question is listed. Other uses of the information are only possible through a systematic search of all entries. These directories are thus difficult to use.
2. Identification of Educational Researchers. The present directories do not separate research personnel from other professional education personnel except by way of the information presented in each entry. The identification of researchers as a group is thus difficult.

¹Leaders in Education, Jaques Cattell and E. E. Ross, eds., Lancaster, Pa.: Science Press, 1948.

²Who's Who in American Education. Nashville, Tenn.: Who's Who in American Education, Inc., 1962.

³Patterson's American Education. Mount Prospect, Ill.: Educational Directories, Inc., 1962-63.

⁴American Men of Science: Social and Behavioral Sciences. Tempe, Arizona: The Jaques Cattell Press, Inc., 1962.

⁵Directory of American Scholars, Jaques Cattell, ed. New York: R. R. Bowler Co., 1957.

3. The Extent of the Population Represented. The present directories are concerned primarily with those individuals who can be considered as "professional" educators, i.e., those connected with university departments of education, educational research bureaus and institutes, public schools, governmental education offices, etc. Many researchers concerned with learning behavior and related problems are working in fields other than that of "professional" education as defined above. These individuals are either difficult to identify or are altogether unavailable within the framework of the present directories.
4. Accuracy or Limitations of Information. The accuracy and usefulness of the information contained in some of the directories listed above is in doubt. Leaders in Education was last published in 1948; much of the information provided is therefore no longer accurate. Who's Who in American Education is published every two years, but according to Guide to Reference Books¹ it must be used with caution because of a tendency toward inaccurate information. Patterson's American Education lists only administrators in public schools and state education departments. In addition, no information is given except name and institution. American Men of Science and Directory of American Scholars are both published with regularity, but list only those educators or educational researchers who were identified through some related field directly included in these volumes.

Professional association directories and directories issued by governmental education agencies include the following:

The Directory of the American Educational Research Association

The Directory of the American Psychological Association

The Directory of the American Sociological Association

Education Directory²

The Directories of State Departments of Education

¹Guide to Reference Books, Chicago, Ill., American Library Association, 1951.

²Education Directory, U. S. Department of Health, Education, and Welfare, Washington, D. C., U. S. Government Printing Office, 1962.

The following limitations restrict the use of these directories:

1. Each directory deals only with the membership of a given organization; the coverage of research personnel through each directory is thus limited.
2. Each directory lists only names, professional titles and addresses; the information available is thus limited.
3. Many individuals are associated with several of the organizations responsible for the various professional directories; many duplications of names therefore exist and require that caution be exercised in any systematic use of these directories.

OBJECTIVES

The preceding considerations clearly indicated the need for a single comprehensive source through which educational personnel may be identified and through which relevant information concerning these individuals may be made available. In view of these considerations and the need which they underscore, the following objectives were established for project No. E - 014, "Development of a National Register of Educational Researchers."

1. To identify, for the first time, the population of educational researchers in the United States;
2. To obtain information from these individuals along the following dimensions:
 - a. Personal vita,
 - b. Educational history,
 - c. Professional identification,
 - d. Professional employment,
 - e. Research areas;

6.

3. To process this information and make it available in such a way as to allow a multiplicity of use and ease in information retrieval.

Several important professional uses have been proposed for the Register and the information obtained through it:

- 1) Selected items of information are to be included along with the names and addresses of individuals in the first issue of the National Register of Educational Researchers to be published by Phi Delta Kappa.

- 2) The U. S. Office of Education will use the Register in expanding its range of communication with educational researchers and in stimulating the development of research.

- 3) On the basis of information gathered concerning research areas, Phi Delta Kappa will offer a service to the field through which individuals can obtain the names and addresses of persons working in a given research area. The purpose of this service will be to facilitate communication among researchers.

- 4) The Register will be a crucial factor in the development and pursual of research concerning the training and nurturing of educational researchers. One of the major difficulties encountered in studying individual researchers and the problems which they face has been that of identifying the educational researcher population from which representative study samples might be selected. The Register will eliminate this problem.

- 5) The information will permit a description of certain professional characteristics of educational researchers.

PROCEDURES

Briefly stated, the major procedural steps of the project were:

- 1) To develop a list of names and addresses of educational research personnel.
- 2) To develop a questionnaire and necessary accompanying materials.
- 3) To circulate the questionnaire and to select out those individuals to be included in the Register.
- 4) To process and analyze data from the questionnaires of those persons to be included in the Register.

Procedural steps 1, 2, and 3 will be discussed in the present chapter; step 4 will be discussed in Chapter II.

Identification of Individuals. Two general avenues of approach existed with respect to identifying researchers in education: first, published sources, including professional directories, journals, and other sources dealing with abstracts of research publications, and second, direct contacts with organizations that are concerned with educational research. In selecting specific sources, it was realized at the outset that education as an activity cuts across many disciplines and that "educational research" may encompass considerable interdisciplinary effort. It was therefore decided that the project could not be concerned just with professional educators, but that it should also be concerned with areas in related fields which might include persons engaged in research in education. The following sources were judged likely to contain names of persons as defined above and were therefore utilized:

8.

1) The primary sources were professional directories, including the AERA Directory, the Educational Psychology, School Psychology, Counseling Psychology, and Testing and Measurement Divisions of the APA Directory, the Educational Sociology Division of the American Sociological Association, and the Directory of Educational Research Agencies and Studies published by Phi Delta Kappa.

2) In addition to the directories, the following professional journals were used: The Review of Educational Research, Psychological Abstracts, Sociological Abstracts, and Child Development Abstracts. All issues of these journals published over a period of five years prior to the beginning date of the project were searched for names.

3) In addition to the directories and journals, the following sources were also used: The Bio-Sciences Information Exchange, Reports of Cooperative Research and Title VII Projects, Research Relating to Children, and Current Sociological Research.

4) In using these sources, it was realized that individuals would be missed who were doing research, but who for various reasons would not appear in such sources. It was anticipated that this would be especially true of individuals connected with the public schools. Directors of State Departments of Education, State Education Associations, and Divisions of Research in school systems, were therefore contacted and requested to provide names of persons doing research within that particular organization or within the schools in each state. Many names were received as a direct result of these requests. One notable instance concerned a respondent from the State of New York who sent to the project a list that he had compiled of individuals

doing research in the schools within that State. When the list arrived, it consisted of a box of 3" x 5" cards that contained approximately 500 names and addresses. Upon collating these names and addresses with the master list already compiled by the project, it was discovered that less than half of these individuals had been found through previous efforts.

The directories and sources listing current research projects provided both names and addresses of individuals. Names obtained from the journals however were not accompanied by addresses. The directories provided addresses for a great many of these names. An additional 1,000 addresses were obtained from the Phi Delta Kappa membership roster. As a result of these varied efforts, 17,000 individual names were identified. Of these, addresses were found for a total of 12,000.

Development of Materials. The materials developed for circulation to individuals included a questionnaire, a sub-fields list, and a research areas list. Samples of these materials may be found on pages 10 through 17.

Many alternative items were developed for possible inclusion in the questionnaire. Since little information was available concerning educational researchers, there was a considerable amount of data that could have been gathered that would have been of genuine interest and value. After due consideration, however, it was decided that the first objective of the questionnaire was to permit the identification of researchers in education, and for this purpose a high return rate of the questionnaire was desirable. This indicated that brevity, representing discretion, was the better part of valor. The questionnaire (see page 10) was therefore kept short and was patterned generally after the

10.

NAME: FIRST MIDDLE LAST

TITLE

BRANCH, DEPARTMENT, OR DIVISION

INSTITUTION OR AGENCY

STREET - PLEASE CHECK: HOME OFFICE

CITY STATE ZIP CODE

NOTE: If either the name or address printed on the mailing label is incorrect, please provide the correct information in the space above.

**NATIONAL REGISTER OF EDUCATIONAL RESEARCHERS QUESTIONNAIRE
NATIONAL REGISTER PROJECT**

191 Arps Hall
1945 North High Street
Columbus, Ohio 43210
Phone 293-4872

Please print or type all answers

VITA:

1. Birthdate (month, day, year) _____ 2. Birthplace (state or country) _____ 3. Sex (please check)
1. Female _____
2. Male _____

EDUCATION:

4. Please provide the following information concerning all of your earned degrees. List your degrees in chronological order.

DEGREE	MAJOR	MINOR	INSTITUTION	LOCATION	YEAR OF DEGREE

5. If you are presently working toward a degree, please indicate the following:

DEGREE	MAJOR	MINOR	INSTITUTION	LOCATION	EXPECTED YEAR OF DEGREE

PROFESSIONAL IDENTIFICATION:

6. From the accompanying Sub-Fields List, select and enter in the lines below in decreasing order the sub-field or sub-fields in which you consider that you have your greatest competence as based upon your education and professional experience. Please list the code number as well as the sub-field title.

CODE # SUB-FIELD TITLE CODE # SUB-FIELD TITLE

1. _____ 3. _____
2. _____ 4. _____

PROFESSIONAL EMPLOYMENT:

7. Have you been professionally employed during the past year? Please check. 1. Yes _____ 2. No _____

If no, you may move on to item 12. If yes, please answer the following items.

8. From the Sub-Fields List, indicate the sub-field or sub-fields in which you are presently employed. Please list the code number as well as the sub-field title.

CODE # SUB-FIELD TITLE CODE # SUB-FIELD TITLE

1. _____ 2. _____

9. Please provide the following information concerning your present position. If you are employed in two positions, list your principal position first. NOTE: If the information that you can provide below is no different from that already provided in your mailing address at the top of the page, you may move on to item #10.

PRINCIPAL POSITION:

(1) _____ (2) _____
YOUR TITLE INSTITUTION OR AGENCY
(3) _____ (4) _____
BRANCH, DEPARTMENT, OR DIVISION CITY STATE ZIP CODE

SECOND POSITION:

(1) _____ (2) _____
YOUR TITLE INSTITUTION OR AGENCY
(3) _____ (4) _____
BRANCH, DEPARTMENT, OR DIVISION CITY STATE ZIP CODE

10. Please indicate the total number of hours per week that you actually devote to the professional position or positions listed above in item 9. _____

11. Please indicate the approximate percent of the number of hours listed above in item 10 that you devote to each of the following activities.

_____ % 1. ADMINISTRATION _____ % 4. OTHER (Please specify) _____
_____ % 2. RESEARCH _____
_____ % 3. TEACHING _____

12. Please list your previous professional positions in chronological order, providing the title of the position, name of institution, and the inclusive dates of employment. If you should need additional space, use item 14 below or attach a separate sheet.

	TITLE	INSTITUTION	DATES FROM-TO
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

RESEARCH ACTIVITIES:

13. Please indicate from the Research Areas List those research areas which are most characteristic of your research activities, both past and present. Do not list specific projects, but indicate those areas which summarize your major research activities. Please list the code number as well as the research area title. If the Research Areas List does not provide an area title relevant to one of your activities, supply your own title, using the code number of the appropriate "other" category. Finally, please check (X) those areas in which you are presently doing research. NOTE: Research is here defined to include historical, philosophical, theoretical-conceptual as well as experimental and other types of empirical studies.

CODE #	RESEARCH AREA	PRESENTLY ACTIVE IN AREA (CHECK X)
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

14. Please list below any comments that you may wish to make concerning any items on the questionnaire. Take particular note of your areas of specialization on the Research Areas List and suggest any additions which in your judgement are necessary.

SUB-FIELDS LIST

for use with the

National Register of Educational Researchers Questionnaire

Please scan all the sub-field categories listed below for those which may apply to you. Sub-fields have been supplied only for those major fields most commonly associated with educational research. Other major fields have been listed, but sub-fields have not been specified. Please supply your own sub-field categories when necessary.

EDUCATION

- 001 Adult Education
- 002 Comparative Education
- 003 Curriculum and Methods
- 004 Educational Administration
- 005 Educational Research
- 006 Elementary Education
- 007 Guidance and Counseling
- 008 Higher Education
- 009 History of Education
- 010 International Education
- 011 Philosophy of Education
- 012 Pre-school Education
- 013 Rural Education
- 014 Secondary Education
- 015 Special Education
- 016 Other Education Sub-field (specify)

EDUCATIONAL SUBJECT AREAS

- 101 Agricultural Education
- 102 Art Education
- 103 Business Education
- 104 Conservation Education
- 105 English/Literature & Drama
- 106 Foreign Languages & Literature
- 107 Geography
- 108 History
- 109 Home Economics
- 110 Hygiene Education
- 111 Industrial & Technical Education
- 112 Mathematics
- 113 Music Education
- 114 Physical Education
- 115 Reading
- 116 Religious Education
- 117 Science Education
- 118 Social Studies
- 119 Vocational Education
- 120 Other Educational Area Sub-field (specify)

PSYCHOLOGY

- 201 Clinical Psychology
- 202 Comparative Psychology
- 203 Counseling and Guidance
- 204 Developmental Psychology
- 205 Educational Psychology
- 206 Experimental Psychology
- 207 General Psychology
- 208 Industrial & Personnel Psychology
- 209 Mathematics of Resource Use
- 210 Personality Psychology
- 211 Physiological Psychology
- 212 Psychometrics
- 213 School Psychology
- 214 Social Psychology
- 215 Statistics & Probability
- 216 Theory & Practice of Computation
- 217 Other Psychology Sub-field (specify)

SOCIOLOGY

- 301 Applied Sociology
- 302 Community and Urban Sociology
- 303 Criminology and Deviance
- 304 Ecology & Demography
- 305 Educational Sociology
- 306 Family
- 307 General Sociology
- 308 Industrial Sociology
- 309 Medical Sociology
- 310 Research Methodology & Technology
- 311 Rural-Urban Sociology
- 312 Social Change & Development
- 313 Social Conflict
- 314 Social Organization
- 315 Sociological Theory
- 316 Sociology of Religion
- 317 Other Sociology Sub-field (specify)

OTHER SOCIAL SCIENCES (Specify Sub-Fields)

- 410 Anthropology
- 420 Economics
- 430 Geography
- 440 History
- 450 Political Science
- 460 Speech
- 470 Other Social Science (specify sub-field)

HUMANITIES (Specify Sub-Fields)

- 510 Art
- 520 Language, Literature & Language Arts
- 530 Music
- 540 Philosophy
- 550 Religion
- 560 Other Humanity (specify sub-field)

PHYSICAL SCIENCES (Specify Sub-Fields)

- 610 Astronomy
- 620 Chemistry
- 630 Engineering
- 640 Geology
- 650 Mathematics
- 660 Meteorology
- 670 Physics
- 680 Other Physical Science (specify sub-field)

BIOLOGICAL SCIENCES (Specify Sub-Fields)

- 710 Agronomy
- 720 Anatomy
- 730 Animal Husbandry
- 740 Botany
- 750 Ecology
- 760 Entomology
- 770 Genetics
- 780 Horticulture
- 790 Medicine & Surgery
- 800 Microbiology
- 810 Nutrition & Metabolism
- 820 Pathology
- 830 Pharmacology
- 840 Physiology
- 850 Zoology
- 860 Other Biological Science (specify sub-field)

OTHER MAJOR FIELD

- 900 (Specify sub-field)

REVISED SUB-FIELDS LIST

000	<u>EDUCATION</u>		<u>EDUCATIONAL SUBJECT AREAS (cont.)</u>
001	Adult Education	124	Performing Arts Education
002	Comparative Education	125	Safety-driver Education
003	Curriculum and Methods	126	Teaching-media Education
004	Educational Administration	127	Consumer Education
005	Educational Research		
006	Elementary Education		
007	Guidance and Counseling	200	<u>PSYCHOLOGY</u>
008	Higher Education	201	Clinical Psychology
009	History of Education	202	Comparative Psychology
010	International Education	203	Counseling and Guidance
011	Philosophy of Education	204	Developmental Psychology
012	Pre-school Education	205	Educational Psychology
013	Rural Education	206	Experimental Psychology
014	Secondary Education	207	General Psychology
015	Special Education	208	Industrial & Personnel Psychology
016	Teacher Education	209	Mathematics of Resource Use
017	Educational Foundations	210	Personality Psychology
018	Mental Retardation	211	Physiological Psychology
019	Parent Education	212	Psychometrics
020	Teaching Media (TV, radio, programmed instruction)	213	School Psychology
021	Educational Communications	214	Social Psychology
023	Nursing Education	215	Statistics & Probability
024	Urban Education	216	Theory & Practice of Computation
		217	Other Psychology Sub-Field (specify)
		218	Evaluation, Measurement, Testing
		219	Data Processing, Computer Techniques, Computation
100	<u>EDUCATIONAL SUBJECT AREAS</u>	220	Human Relations
101	Agricultural Education	221	Role Theory
102	Art Education	222	Human Engineering
103	Business Education	223	Psycholinguistics
104	Conservation Education	224	Learning
105	English/Literature & Drama	225	Psychotherapy, Group Therapy, Psycho- analysis
106	Foreign Languages & Literature	226	Military Psychology
107	Geography		
108	History		
109	Home Economics		
110	Hygiene Education		
111	Industrial & Technical Education	300	<u>SOCIOLOGY</u>
112	Mathematics	301	Applied Sociology
113	Music Education	302	Community and Urban Sociology
114	Physical Education	303	Criminology and Deviance
115	Reading	304	Ecology & Demography
116	Religious Education	305	Educational Sociology
117	Science Education	306	Family
118	Social Studies	307	General Sociology
119	Vocational Education	308	Industrial Sociology
120	Other Educational Area Sub-Field (specify)	309	Medical Sociology
121	Medical Education	310	Research Methodology & Technology
122	Rehabilitation	311	Rural-Urban Sociology
123	Speech Education - Hearing	312	Social Change & Development
		313	Social Conflict
		314	Social Organization

- SOCIOLOGY (cont.)
 315 Sociological Theory
 316 Sociology of Religion
 317 Other Sociology Sub-Field (specify)

400 OTHER SOCIAL SCIENCES (Specify Sub-Fields)

- 410 Anthropology
 420 Economics
 430 Geography
 440 History
 450 Political Science
 460 Speech
 470 Business Organization
 471 Accounting
 472 Business Administration
 473 Business Law
 474 Management
 475 Marketing
 480 Public Administration
 490 Military Science

500 HUMANITIES (Specify Sub-Fields)

- 510 Art
 520 Language, Literature & Language Arts
 530 Music
 540 Philosophy
 550 Religion
 560 Humanity (specify Sub-Field)
 561 Liberal Arts
 562 Journalism
 563 Law
 521 Library Science

600 PHYSICAL SCIENCES (Specify Sub-Fields)

- 610 Astronomy
 620 Chemistry
 630 Engineering
 640 Geology
 650 Mathematics
 660 Meteorology
 670 Physics
 680 Operation Research
 681 History & Philosophy of Science
 690 Industrial Arts
 691 Industrial Research

700 BIOLOGICAL SCIENCES (Specify Sub-Fields)

- 710 Agronomy
 720 Anatomy
 730 Animal Husbandry
 740 Botany
 750 Ecology
 760 Entomology
 770 Genetics
 780 Horticulture
 790 Medicine & Surgery
 795 Nursing
 800 Microbiology
 810 Nutrition & Metabolism
 820 Pathology
 830 Pharmacology
 840 Physiology
 850 Zoology
 860 Psychiatry
 861 Psychiatric Administration
 870 Science Manpower

900 OTHER MAJOR FIELD (Specify Sub-Field)

- 901 Science

RESEARCH AREAS LIST

for use with the

National Register of Educational Researchers Questionnaire

The list of research areas provided below is to be used in connection with questionnaire item No. 13, requesting the identification of your research activities. This list is conceived as a comprehensive set of research topics, each of which may be approached from the standpoint of any of the major academic disciplines related to education. You will therefore find no special sections of the list devoted exclusively to such traditional academic areas as the history of education, philosophy of education, psychology of education, sociology of education, etc. Please scan carefully all of the research areas provided to locate those by which you can identify your research activities. If you cannot locate a research area title which adequately identifies one or more of your activities, please supply your own title.

ADMINISTRATION AND ORGANIZATION

- 001 Accreditations
- 002 Admissions
- 003 Administrative goals
- 004 Integration
- 005 Inter-agency relationships
- 006 Leadership development
- 007 Materials and supplies
- 008 Organizational patterns of educational institutions
- 009 Personnel employment practices
- 010 School calendar and scheduling
- 011 School finance
- 012 School plant
- 013 School-community relationships
- 014 Staff relations
- 015 Student services: health, financial aid, etc.
- 016 Transportation
- 017 Other administration and organization research area (specify)

CURRICULUM

- 101 Curricular goals and standards
- 102 Pre-school curricula
- 103 Elementary curricula
- 104 Secondary curricula
- 105 Junior college curricula
- 106 Vocational-technical school curricula:
 - Higher educational curricula:
 - Educational specialist curricula:
- 107 Administrator education
- 108 School-counselor/psychologist education
- 109 Teacher education
- 110 Other educational specialist (specify)
- 120 Liberal arts curricula
- 121 Graduate and professional curricula
- 122 Other higher education curricula (specify)
- 140 Adult and continuing education curricula
- 141 Curriculum methodology
- 142 Other curriculum research area (specify)

EDUCATIONAL RESEARCH AS AN ACTIVITY

- 201 Development of educational research
- 202 Dissemination of knowledge and techniques
- 203 Goals, functions, and dimensions of inquiry in education
- 204 Techniques of theory building
- 205 Techniques of experimental and statistical design
- 206 Training and nurturing of educational researchers
- 207 Other "educational research as an activity" research area (specify)

GOALS AND FUNCTIONS OF EDUCATION

- 300 (Specify sub-topic on the questionnaire)

GUIDANCE AND COUNSELING/ SCHOOL

PSYCHOLOGY

- 401 Development of guidance and counseling services
- 402 Goals and functions of guidance and counseling
- 403 Personnel training and working conditions (see Personnel section)

Student problems:

- 404 Absenteeism
- 405 Academic achievement and records
- 406 Delinquency: character rehabilitation
- 407 Drop-outs
- 408 Emotional disturbances
- 409 Job opportunities
- 410 Therapeutic practices
- 411 Vocational counseling and placement
- 412 Other student problems research area (specify)
- 430 Other guidance and counseling research area (specify)

HISTORICAL DEVELOPMENT OF EDUCATION

- 500 (Specify the research area from other topics provided on this list. When necessary supply your own area title.)

Research Areas List (continued)

PERSONNEL

- 601 Academic freedom
- 602 Biographical studies of educational personnel
- 603 Characteristic roles and behaviors of educational personnel
- 604 Employment practices and working conditions
- 605 Interrelations among educational personnel
- 606 Professional training and qualifications
- 607 Other personnel research area (specify)

THE TEACHING-LEARNING PROCESS

Individual behaviors and characteristics of teachers and students:

- 701 Cognitive behavior
- 702 Communicative behavior
- 703 Creative behavior
- 704 Emotional behavior
- 705 Interpersonal relationships
- 706 Learning behavior
- 707 Perceptual behavior
- 708 Social behavior
- 709 Other (specify)

Special student groups:

- 720 Blind and partially seeing
- 721 Crippled
- 722 Deaf and hard of hearing
- 723 Emotionally disturbed or socially maladjusted
- 724 Gifted
- 725 Mentally retarded
- 726 Special health problems
- 727 Speech impaired
- 728 Other (specify)

Factors influencing individual behaviors:

- 730 Classroom conditions
- 731 Home environmental factors
- 732 Attitudes
- 733 Achievement
- 734 Motivation
- 735 Readiness
- 750 Social factors
- 751 Subject matter organization
- 752 Other factors influencing individual behaviors (specify)

Teaching methods and media:

- 760 Educational films
- 761 Tapes and other auditory media
- 762 Radio
- 763 Reading
- 764 Subject matter methods and media
- 765 Teacher techniques
- 766 Teaching machines and programmed learning
- 767 Textbooks
- 768 Television
- 769 Other teaching methods and media (specify)

- 780 Other teaching-learning process research areas (specify)

TESTING AND MEASUREMENT

- 801 Goals and functions of testing and evaluation
- 802 Testing methodology

Types of tests and measurements:

- 803 Aptitudes
- 804 Creativity
- 805 Intelligence
- 806 Other (specify)
- 820 Achievement
- 821 Admissions
- 822 Emotional problems
- 823 Interests or ambitions
- 824 Motivation
- 825 Personality
- 826 Placement
- 827 Readiness
- 828 Reading
- 829 School adjustment
- 830 Subject matter tests
- 831 Vocational choice
- 832 Other types of tests (specify)

- 850 Other testing and measurement research area (specify)

OTHER EDUCATIONAL RESEARCH AREA

- 900 (Specify)

REVISED RESEARCH AREAS LIST

- | | | | |
|---|--|-----|---|
| 000 <u>ADMINISTRATION AND ORGANIZATION</u> | | | <u>CURRICULUM (cont.)</u> |
| 001 Accreditations | | 122 | Other higher educational curricula (specify) |
| 002 Admissions; enrollment | | 140 | Adult and continuing educational curricula |
| 003 Administrative goals and policies | | 141 | Curriculum methodology |
| 004 Integration and racial conflict | | 142 | Articulation |
| 005 Inter-agency relationships | | 143 | Student activities; extracurricular |
| 006 Leadership development | | 144 | Outside school educational programs |
| 007 Materials and supplies; educational media | | 145 | Urban education |
| 008 Organizational patterns of educational institutions | | | |
| 009 Personnel employment practices | | 200 | <u>EDUCATIONAL RESEARCH AS AN ACTIVITY</u> |
| 010 School calendar and scheduling | | 201 | Development of educational research |
| 011 School finance and statistics | | 202 | Dissemination of knowledge and techniques; educational communications |
| 012 School plant - school facilities | | 203 | Goals, functions, and dimensions of inquiry in education |
| 013 School-community relationships; religion | | 204 | Techniques of theory building and educational theory |
| 014 Staff relations | | 205 | Techniques of experimental and statistical design and analysis |
| 015 Student services: health, financial aid, etc. | | 206 | Training and nurturing of educational researchers |
| 016 Transportation | | 207 | Application of research results and theory in educational settings |
| 017 Pupil personnel | | 208 | Administration and organization of research projects |
| 018 Board of Education | | 209 | Organizing and summarizing research results |
| 019 School Boards | | 210 | Research methodology |
| 020 School records | | | |
| 021 School law and legislation | | 300 | <u>GOALS AND FUNCTIONS OF EDUCATION</u> |
| 022 Education associations and professional societies | | 301 | Consumer education |
| 023 Federal government | | 302 | Curriculum |
| 024 State Departments of Education | | 304 | Guidance and counseling |
| 025 Scholarships | | 307 | Teaching-learning process |
| 026 Summer school | | | |
| 027 Educational politics | | 400 | <u>GUIDANCE AND COUNSELING/SCHOOL PSYCHOLOGY</u> |
| | | 401 | Development of guidance and counseling services |
| 100 <u>CURRICULUM</u> | | 402 | Goals and functions of guidance and counseling |
| 101 Curricular goals and standards | | 403 | Personnel training and working conditions (see Personnel section) |
| 102 Pre-school curricula | | | |
| 103 Elementary curricula | | | Student problems: |
| 104 Secondary curricula | | 404 | Absenteeism-attendance |
| 105 Junior college curricula | | 405 | Academic achievement and records - underachievement |
| 106 Vocational-technical school curricula: | | | |
| Higher educational curricula: | | | |
| Educational specialist curricula: | | | |
| 107 Administrator education | | | |
| 108 School-counselor/psychologist education | | | |
| 109 Teacher education | | | |
| 110 Other educational specialist (specify) | | | |
| 120 Liberal arts curricula | | | |
| 121 Graduate and professional curricula | | | |

GUIDANCE AND COUNSELING (cont.)

- 406 Delinquency: character rehabilitation
- 407 Drop-outs - attrition
- 408 Emotional disturbances
- 409 Job opportunities and occupational analyses
- 410 Therapeutic practices, processes and outcomes
- 411 Vocational counseling and placement
- 412 School adjustment and growth
- 413 Transfer students
- 414 Rehabilitation
- 415 Married students and intersex relations
- 416 Classroom problems
- 417 Academic advising
- 418 Unemployment problems
- 419 Curricular choices
- 420 School social work
- 430 Follow up studies of graduates

HISTORICAL DEVELOPMENT OF EDUCATION

- 500 Administration and organization
- 510 Curriculum
- 520 Educational research
- 530 Goals and functions
- 540 Guidance
- 550 Historical development; history of education
- 560 Personnel
- 570 Teaching-learning
- 580 Testing and measurement
- 591 Comparative Administration

PERSONNEL

- 601 Academic freedom
- 602 Biographical studies of educational personnel
- 603 Characteristic roles and behaviors of educational personnel; successful role performance
- 604 Employment practices and working conditions
- 605 Interrelations among educational personnel
- 606 Professional training and qualifications
- 607 Supervision

THE TEACHING-LEARNING PROCESS

Individual behaviors and characteristics of teachers and students:

THE TEACHING-LEARNING PROCESS (cont.)

- 701 Cognitive behavior and development
- 702 Communicative behavior; language
- 703 Creative behavior - creativity
- 704 Emotional behavior and development
- 705 Interpersonal relationships; group dynamics
- 706 Learning behavior - learning and retention
- 707 Perceptual behavior and development
- 708 Social behavior
- 709 Physical behavior and development
- 710 Child Development
- 711 Moral behavior
- 719 Special education; special student groups
- 720 Blind and partially seeing
- 721 Crippled
- 722 Deaf and hard of hearing
- 723 Emotionally disturbed or socially maladjusted
- 724 Gifted; talented or superior students
- 725 Mentally retarded and slow learners
- 726 Special health problems: physical and mental health
- 727 Speech impaired
- 728 Adolescence
- 729 Culturally deprived and different
- Factors influencing individual behaviors and education
- 730 Classroom conditions and grouping; school climate
- 731 Home environmental factors
- 732 Attitudes, values, interests
- 733 Achievement - underachievement and overachievement
- 734 Motivation and emotion
- 735 Readiness
- 750 Social factors
- 751 Subject matter organization
- 752 Economic factors
- 753 Aspiration
- 754 Human factors
- 755 Adults and the aging
- 756 Academic student groups
- 757 Educational factors
- 758 Normal children
- 759 Teaching methods and media:
- 760 Educational films
- 761 Tapes and other auditory media
- 762 Radio
- 763 Reading
- 764 Subject matter methods and media

THE TEACHING-LEARNING PROCESS (cont.)

- 765 Teacher techniques; general teaching techniques
- 766 Teaching machines and programmed learning
- 767 Textbooks; educational books and papers
- 768 Television
- 780 Educational linguistics

800 TESTING AND MEASUREMENT AND EVALUATION

- 801 Goals and functions of testing and evaluation
- 802 Testing methodology: construction, analysis, interpretation

Types of tests and measurements:

- 803 Aptitudes
- 804 Creativity
- 805 Intelligence
- 806 Other (specify)
- 820 Achievement - underachievement
- 821 Admissions
- 822 Emotional problems
- 823 Interests or ambitions, attitudes, values
- 824 Motivation
- 825 Personality
- 826 Placement
- 827 Readiness
- 828 Reading
- 829 School adjustment
- 830 Subject matter tests
- 831 Vocational choice and career development
- 832 Sociometric tests
- 850 Norms and prediction studies
- 851 School program or system evaluation
- 852 Computers and other data processing in education

OTHER EDUCATIONAL RESEARCH AREA

- 900 Comparative education
- 901 Secondary education
- 902 Higher education
- 903 Educational sociology
- 904 Philosophy of education
- 905 Elementary education
- 906 International education
- 907 Educational psychology
- 908 Anthropological (including cross-cultural) studies of education
- 909 Community development

questionnaires used by the National Science Foundation in maintaining the National Register of Scientific and Technical Personnel. The following items were included in the questionnaire:

- 1) Personal vita, including birthdate, birthplace, and sex.
- 2) Educational history, including degrees, majors and minors of degrees, names and locations of institutions from which degrees were received, and years in which degrees were received.
- 3) Professional identification, involving declared sub-fields of professional competency.
- 4) Professional employment, including sub-fields of employment, title, department, institution and location of present position or positions, total number of hours per week devoted to professional duties and activities, percentages of this total number of hours devoted to administration, research, teaching, and other activities, and job history, including titles, institutions, and years of employment for past positions.
- 5) Research activities, including research areas topics and an indication of present or past activities in these areas.
- 6) A final item was included which provided an opportunity for additional comments or clarifications of previous responses.

It was anticipated that questionnaire items requesting titles of professional areas and sub-areas, such as sub-fields of professional identification or majors and minors of degrees, would involve considerable difficulty, both in coding and in subsequent data interpretation, if some comprehensive reference list were not provided for the respondents. Consequently, a list of professional fields and sub-fields

titles was created (see page 11). This list was patterned somewhat after the specialties list used by the National Science Foundation, but did not contain breakdowns of areas beyond major divisions within fields. After pre-testing the list, sub-fields titles were provided only for the three major fields most closely related to education - education, psychology, and sociology. All other fields considered likely to be necessary were listed by related disciplines as follows: other social sciences, humanities, physical sciences, and biological sciences. Individuals were asked to supply their own sub-fields titles for these major fields when necessary. The same request was made concerning the fields of education, psychology, and sociology when the supplied list of sub-fields was inadequate for individual needs.

The same necessity for a basic reference list of titles was felt with respect to topics or areas of research activities as was felt with respect to professional sub-fields. Since research areas cut across professional areas, it was determined that a second list (see page 14) was needed which would be created primarily with respect to related areas or problems of research interest, and without particular reference to academic fields. Research areas titles were gathered from many sources and were organized under the following major headings:

- Administration and Organization
- Curriculum
- Educational Research as an Activity
- Goals and Functions of Education
- Guidance and Counseling/School Psychology
- Personnel
- The Teaching-Learning Process
- Testing and Measurement

As with the Sub-Fields List, individuals were asked to supply their own research area title or titles when necessary.

Both of these lists represent useful taxonomies of the field of education: the Sub-Fields List pertaining to professional areas, and the Research Areas List pertaining to current research areas or topics. These taxonomies have been greatly expanded by the free responses provided by individuals on the questionnaire. The Sub-Fields List originally contained some 99 items. After the addition of items found on the return questionnaires, it now contains 145 items (see pages 12 and 13). The Research Areas List originally contained 111 areas, and now contains a total of 182 (see pages 15 through 17).

Criteria for Inclusion of Individuals in the Register. As indicated earlier, addresses were found for 12,000 of the 17,000 names that had been identified. Questionnaires were mailed to these 12,000 individuals and a return of approximately 6,600, or 55 percent, was received. Of these approximately 6,000, or 91 per cent of the total returns, were placed into the Register. Individuals were excluded from the Register primarily for two reasons: first, either they themselves indicated on the return questionnaire that they were not educational researchers, or second, it was decided from the information provided on the questionnaires that they were not educational researchers. The criteria by which individuals were placed in the Register and some of the problems surrounding these criteria are discussed below.

From the nature of the sources used it was inevitable that at least some individuals would be identified who might not be considered to be educational researchers. However, virtually nothing was known about these people except their names and addresses, and it was therefore impossible to make judgments about them beforehand. Final decisions

as to whether or not given individuals could be included in the Register had to be based upon the information contained in the returned questionnaires. No great problems were expected in deleting questionnaires of individuals who should not remain in the Register. It was felt that most individuals having little connection with, or interest in, professional education would not think of themselves as educational researchers and would eliminate themselves by informing the project so or by simply ignoring the questionnaire sent to them. For such individuals who did respond it was recognized that some criteria would be necessary in making decisions.

The first decision in the way of criteria was to exclude anyone who did not indicate either a present or past activity in some area on our Research Areas List, regardless of professional background. As this criterion was applied it was found that some of the respondents were able to identify themselves through certain areas on the Research Areas List, while at the same time their professional profiles as evidenced from the questionnaires gave little reason to identify them as educational researchers. This, of course, was most apt to occur in areas which have their roots in other disciplines, especially those of psychology and sociology. For example, it was quite possible for an individual to be pursuing research in areas such as learning, perception or motivation, without having a recognizable connection with the educational enterprise.

With this kind of problem at hand, it became apparent that in order to arrive at some fairly well defined and consistent criteria, a distinction had to be drawn between "education" as individual developmental

behavior in which human beings engage in many, many situations, and "education" as an organized, institutional process within which "educational" behavior occurs under more formal circumstances. A decision was therefore necessary as to whether a broad definition was to be utilized which would equate educational research with the general study of human development, or whether educational research was to be delimited by relating it to the study of more formal educational behavior occurring in schools and in institutions of higher learning. Since the field of education as a profession is concerned primarily with the study of education as a formal, institutionalized process, and since it appeared quite obvious that the Register ought to be focused primarily towards the purposes and needs of the profession of education, the decision was made that the Register should contain qualified individual researchers identified in this context. For the purposes of the project, educational researchers were therefore defined as those who are pursuing or who have recently pursued research that is directly related to the study of educational institutions, and to the spectrum of individual and social problems which arise within such institutions. It was also decided that persons in vital supportive roles, i.e., research administrators, coordinators of research, etc., should also be included because of their direct influence upon the research climate. As a result of these considerations the following criteria were established for the Register:

- 1) All individuals were included who chose areas on the Research Areas List which indicated that they were involved in educational research as delimited by our definition. Such areas were considered to be all those which are clearly oriented toward the concerns of professional education, in contrast to those which had an interdisciplinary implication and which could easily be listed by individuals who had no connection whatsoever with professional education.

2) For those individuals whose research areas were of a more interdisciplinary nature, we looked for other information on the questionnaire which would indicate that the individual's research was probably oriented in the direction of our definition. Such an orientation was assumed to be very likely if one or more of the following items of information were found:

- a) a degree in an educational area, including educational psychology, school psychology, or educational sociology;
- b) professional identification in an educational area, including educational psychology, school psychology, or educational sociology;
- c) present or past employment in the schools, or in other institutional settings concerned with professional education.

With these criteria in hand, each returned questionnaire was reviewed and relevant decisions made.

It is obvious that the above criteria are somewhat arbitrary. It is possible that an individual might be doing research in an interdisciplinary area, might not meet any of the criteria under items 2a, 2b, or 2c, and yet might still be involved in research that is directly related to the concerns of professional education. On the other hand, a person might satisfy criteria 2a, 2b, and 2c, and still not be involved in research directly related to professional education. It is admitted then, that the criteria are effective under more usual professional conditions but may be oversimplified relative to those individuals whose interests and whose education and employment patterns are unusual mixtures of major disciplines. These criteria, however, are as good as is now possible in terms of the information provided on the present questionnaire. This situation, of course, points to a needed revision of the questionnaire prior to its circulation for the next

issue of the Register. More information must be obtained concerning the specific research activities of individuals. When this is possible, more exacting criteria may be established.

One result of the above described circumstances is that some individuals who have returned questionnaires, but who have been excluded from the first issue of the Register, might in fact qualify if more information concerning these activities were known. With a revised questionnaire and the all-important experience of compiling the first Register, errors of this type should not occur in later publications of the Register. In a field as complex as that of educational research, it is impossible that an initial effort at compiling a comprehensive directory of individuals would not result in at least some degree of error.

The Continuing Nature of the Register. In order to be of maximum use to the profession, any issue of the Register should contain only those individuals who have a genuine interest and participation in research in education. Thus the Register, by nature, will be a flexible document relative to the particular constellation of individuals included in any issue. As professional interests and career lines of individuals change so will the contents of the Register change. At each new issue, many individuals will undoubtedly be dropped and others added, all of which will be relative to the declared activities and interests of the individuals themselves. In this regard it must be carefully noted that the Register is not a directory of any professional organization, nor is it an attempt to identify any "special" group in which "membership" is permanent. On the contrary, it is an

attempt to permit the field of education to retain accurate contact, at any given point in time, with its fluctuating but always existing core of research personnel. In this way it is hoped that the research enterprise in education may maintain a maximum level of communication with the field-at-large and may in turn be better sustained by that field, to which its contribution is so necessary and so vitally needed.

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CHAPTER II

THE ANALYSIS

DESCRIPTION OF THE ANALYSIS

The analysis of National Register data was undertaken in two phases. First, data from the questionnaire was processed and distributions were obtained for the various categories of information. These data, presented in Chapter III, provide a description of the population of educational researchers as represented by the analysis group. The second phase of the analysis consisted of cross-tabulations of responses per selected categories of information. These data, to be illustrated in the discussion in Chapter IV, permit comparisons of professional subgroups of individuals within the analysis group. The categories of information and accompanying data card formats and coding lists used in each of these phases of the analysis will be described in the following discussion.

Analysis Phase I. Data recorded from the returned questionnaires was encoded and keypunched according to the card formats for data Cards #1 through #5 as presented on pages 37 through 40. These card formats (1) list the categories of information encoded, (2) indicate the coding lists (pages 37 through 40) or other sources from which the codes were obtained, (3) list the number of digits in each code, and (4) list the column numbers on the respective card in which each item of information is punched. The data recorded from the questionnaires is distributed over the five data cards as follows: Card #1 (pages 37

and 38) Vita and Education, Card #2 (page 38) Present Degree Program and Professional Identification, Card #3 (page 39) Employment, Card #4 (page 40) Job History, and Card #5 (page 40) Research Areas. Each item of information indicated on this format can be briefly described as follows:

Card #1

1. Birthdate. Birthdate was coded in terms of the last two digits of the year indicated by the respondent.
2. Birthplace. Birthplace was coded from List #1 (pages 43 and 45), which provides a code for each state, U. S. territory, and foreign country.
3. Sex. Sex was coded as indicated on the format.
- 4a. Highest Level Degree. Under educational history data, the highest level degree was chosen as a major classification because it was felt that a person's most advanced degree, regardless of level, would have the most direct influence on his activities, and in this sense would provide a common denominator for all respondents. A number of sub-items related to highest level degree was coded.
 - (1) Degree by Initials. The highest level degree of each respondent was coded from List #2a (page 46). The code was designed to permit a distribution of specific degrees as well as degrees by level. Highest level degrees at the bachelor's and master's levels were also coded later under first bachelor's degree or first master's degree. This procedure was designed to assure that an analysis of degrees at these levels would be complete.
 - (2) Second Degree Indicator. The second degree indicator code was designed to indicate whether or not a second degree was listed by all respondents at the same level as that coded under highest level degree. The purpose of this procedure was to simplify the analysis of double degrees at the same level.
 - (3) Majors. Degree majors were coded from the Sub-Fields List (see page 11). This list was expanded as free responses providing new categories appeared on the questionnaires (see pages 12 and 13).

- (4) Minor. Degree minors were coded the same as degree majors.
- (5) Institutional Information. Institutional information included data taken not only from the questionnaires, but also from the Education Directory, Part 3, Higher Education (1963).
- (a) Source of Control. The source of control for each institution was determined from the entry for that institution in the Education Directory. Source of control categories used in the directory were assigned codes as found in List #3a (page 47).
 - (b) Educational Level. Educational level data were taken from the Education Directory and were coded as found in List #3b (page 47).
 - (c) Type of Program. Type of program data were taken from the Education Directory and were coded as found in List #3c (page 47).
 - (d) Enrollment to the Nearest One Hundred. Enrollment data were also taken from the Education Directory. The actual numbers found were rounded off to the nearest one hundred.
 - (e) Location, (f) Name. The Education Directory lists institutions alphabetically within each state. Codes for state of institutional location were taken from List #1a (page 43). Code numbers were then assigned consecutively to the institutions listed within each state. Individual institutions were thus identified by a combination of codes for location and name.
- (6) Year of Degree. Year of degree was coded in terms of the last two digits of the year as indicated by the respondent.
- 4b. First Bachelor's Degree. The same amount of data was available concerning bachelor's and master's degrees as was available concerning highest level degrees. However, these degrees were considered to be of less importance than the highest level degree, and the amount of information coded was thus considerably reduced. Two degrees at a given level were somewhat common; it was therefore decided to code a second as well as a first degree, although the amount of data recorded was further reduced.
- (1) Degree by Initials. A reduced code as found in List #2b (page 46) was used for all bachelor's and master's degrees.

- (2) Second Degree Indicator. The second degree indicator was designed to perform the same function under bachelor's and master's degrees as under highest level degree.
- (3) Major. Degree major was coded by means of the first digits of codes from the Sub-Fields List (page 11). This procedure provided degree major codes based upon academic fields rather than sub-fields.
- (4) Year. Year of degree was coded the same as under highest level degree.
- 4c. Second Bachelor's Degree. Degree by initials, major and year were coded for second bachelor's degree. The codes for these items were derived by the same means as indicated under first bachelor's degree.
- 4d. First Master's Degree. Information coded on the first master's degree included the same items and means of coding as listed for first bachelor's degree.
- 4e. Second Master's Degree. The information coded under second master's degree included the same items and means of coding as indicated under second bachelor's degree.
- 4f. Second Doctoral or Professional Degree. The information coded for second doctoral or professional degree included the same items of information and same means of coding as employed under highest level degree.

Card #2

- 5. Present Degree Program. Information coded for present degree programs included the same items and means of coding employed under second doctoral or professional degree and highest level degree.
- 6. Professional Identification. Individuals were asked to indicate up to four sub-fields of professional identification in order of importance. Responses were coded from the Sub-Fields List and were recorded in order as presented by the respondents on the questionnaires. A majority of the new titles appearing on the Sub-Fields List was obtained through this item.

Card #3

- 7. Employment. Respondents were asked to indicate whether or not they were presently employed.

8a, 8b. Sub-fields of Employment. Individuals were asked to indicate up to two sub-fields in which they were presently employed. These items were coded from the Sub-Fields List.

9a. Principle Position. The questionnaire requested information relative to the respondent's principle position, and if relevant, to a second position. The information requested included title, institutional agency, branch, department or division, and city, state, and zip code. It was impossible to code the multitude of differing responses provided by the respondents under this item. A system of coding was therefore developed by which the information provided could be classified under relevant employment categories.

(1) First Assignment.

- (a) Status, (b) Title. Titles of respondents were coded according to status levels as indicated in List #4a (page 48). This procedure was developed to permit the subgrouping of individuals according to employment levels of responsibility. Individual titles were also available within status categories. (List #4b, page 48).
- (c) Institutional Type. The institutions or agencies listed by respondents were classified according to categories included in List #5a (page 49). This procedure was designed to permit subgrouping of individuals according to the type of institution in which they were employed.
- (d) Unit Type. Institutional units within which respondents were employed were classified according to categories supplied in List #5b (page 49). These categories were usually applied to branches, departments, or divisions supplied by the respondents. When no institutional sub-units were indicated by the respondents these categories were applied directly to institutions or agencies of employment.
- (e) Field Type. The academic fields with which institutional units were associated were coded according to the categories provided in List #5c (page 49). This procedure was designed to permit distinctions between academic departments or divisions within colleges and universities. By cross-sorting field type with unit type and institutional type it is possible to identify subgroups of individuals according to specific department or divisional areas of employment within institutions. Further subgroupings according to level of responsibility

within institutional units can be obtained by further cross-sorting involving status. Subgroups of individuals with the same specific titles can be obtained by additional sorting involving titles.

- (2) Second Assignment. It was discovered that a number of respondents had second assignments within a single institution or institutional unit. Information concerning status, title, institutional type, unit type, and field type were coded for all second assignments. Codes were obtained by the same means employed under first or only assignment.
 - (3) Further Institutional Information. Further information concerning institutions was coded following the coding of information concerning first and second assignments. The items of information coded include source of control, educational level, educational program, enrollment to nearest one hundred, and location and name. Codes for this information were obtained by the same means as employed under highest level degree.
- 9b. Second Position. Information coded for second positions included the same items and sources of codes as employed under principle position.
10. Number of Hours of Employment Per Week. Individuals were asked to indicate the total number of hours actually devoted per week to the professional position or positions listed under item #9. The numbers provided by the respondents were coded directly without any change.
11. Per Cent of Time Devoted to the Following Activities. Individuals were asked to indicate the approximate percentage of the number of hours indicated in item 10 that they devoted to administration, research, teaching, or other activities. Respondents were further asked to specify other activities. The percentage figures indicated by the respondents were coded directly without change. Activities specified under other were coded according to List #5d (page 49).

Card #4

- 12a. Most Recent Previous Position. Status, title, institutional type, unit type, and field type were coded in the same manner for most recent previous position as for present position. In addition to these items of information, the following were also recorded: (6) the initial year of employment for the most recent previous position, (7) inclusive number of years in most recent previous position, (8) relation of time of position to the times of degrees (List #5e, page 49).

- 12b. through 12f. Earlier Previous Positions. Information recorded for earlier previous positions included the same items and sources of codes as employed under most recent previous position.
- 12g. Number of Positions Coded. An indication was made of the total number of previous positions for which information was coded.

Card #5

- 13a. through 13f. Research Areas. Enough space was provided on the questionnaire for the respondents to list up to six research areas. The respondents were requested to indicate whether or not they were presently active in these areas. Presently (13c.) and previously (13d.) active areas were separated and were coded (see Research Areas List, page 14) in order of appearance on the questionnaire. The total number of areas listed as presently active (13a.) or previously active (13b.) was recorded. As the coding of research areas progressed, it was discovered that a number of individuals listed more than six areas. It was decided that these additional areas should be recorded and additional space (13e. and 13f.) was provided on the data cards for this purpose.

The first phase of the analysis involved frequency counts of the various items of information discussed above. The distributions derived from these frequency counts are discussed in Chapter III. These distributions provide a general picture of the population of educational researchers, scientists, and other persons and professional characteristics represented by the various categories of information involved.

Analysis Phase II. Some of the more interesting data available from the Register concern comparisons of various professional subgroups. Each item of information indicated on the data card format provided a set of categories which could be used to identify subgroups of individuals that could then be compared by tabulations of responses from other items of information also indicated on the format. If such a procedure were systematically undertaken a tremendous amount of data could be made available concerning a great many different subgroups of

individuals. Such a systematic analysis was not possible within the resources of the present project. Certain items of information which were considered to be of most interest were therefore selected and analyses of subgroups determined by these items of information were undertaken. The presentation of all data thus available at the present time is beyond the scope of this report. Selected data from some of these analyses are presented in Chapter IV.

A limited computer program was utilized for the analyses described above. This program required that all information to be included in the analysis had to be contained in a single data deck. It was therefore necessary to reduce the information recorded according to the original five card format described above into a single card. The format for this card (Card #6) is presented on pages 41 and 42. The items of information involved in the analysis and the ways in which this information was reduced from the original data card will be discussed below.

The following information is provided in the format for Card #6: those items of information included in the subgroup analyses, the number of the card in the original format from which the information was taken, the numbers of the columns in which that information originally appeared, and the numbers of the columns in which the information is punched in Card #6. An indication as to whether or not the information was in any way altered is also provided. List #6 (pages 50 and 51) lists the new codes for those items of information which have been altered. Generally speaking, the following procedures were used:

1. Items involving numbers were generally reduced to single digit codes representing specified intervals.
2. Items involving geographic location were reduced to geographic regions of the United States, with all territories and other countries being reduced to a single coding category. The geographic regions of the United States utilized are those employed by the Bureau of the Census.
3. Certain items involving use of the Sub-Fields List were reduced to a single digit code comprising the first digits of the major sub-fields categories. This procedure provides divisions based upon major academic fields.

DESCRIPTION OF THE ANALYSIS GROUP

The manner in which individuals were identified and the criteria used in placing individuals in the Register were presented in Chapter I. The procedures and policies thus described directly affect the character of the group of individuals included in the Register, and thus influence the data derived and the manner in which these data may be interpreted. Before presenting the data it is therefore important first to consider the degree to which the analysis group may be said to represent the educational researcher population. As a result of the discussion in Chapter I, several important statements may be made concerning the character of the analysis group:

1. The analysis group includes individuals who were identified through professional sources related to educational research.
2. The analysis group contains individuals who are positively identified as researchers, and who indicate areas of research activity directly related to the field of professional education.
3. The analysis group contains individuals who now have, or who have had, identifiable connections with professional education.

The above statements indicate that from the standpoint of professional identity and research activities, data from the individuals in the Register may be considered to provide an accurate picture of the field. A further note must be made concerning the size of the group from which the data were taken. Not all individuals included in the first issue of the Register are involved in the analysis. To do so would have been impossible because of the extended period of time over which the questionnaires were returned. Some reasonable cut-off date therefore had to be established beyond which questionnaires could not be included in the analysis. By September 1, 1964, questionnaires had been received from 4,500 of the 10,000 individuals included in the original mailings. After deletion of questionnaires according to the criteria discussed in Chapter I (pages 20 through 24), an analysis group of 3,923 questionnaires was obtained. As indicated above, this number does not include all individuals who are in the Register, nor does the Register include all individuals who might be identified as educational researchers. However, there is little doubt that a majority of the leading researchers in the field of education are included in the analysis group. Furthermore, on the basis of what is known about the master list of names and the sources from which it was obtained, there is also little doubt that this group contains at least one-half of all educational researchers in the United States. It therefore appears safe to assume that the analysis group is large enough in size to be adequately representative of the educational researcher population.

Questionnaire Items #1 through #4

Item	Code	Column #s
Initial ID#	00000-99999	1-5
Card #	1	6
1. Birthdate, year: code last two digits	00-99	7-8
2. Birthplace, state or country: <u>List #1</u>	000-999	9-11
3. Sex: female - 1, male - 2	1-2	12
4a. Highest Level Degree		
(1) Degree by initials: <u>List #2a</u>	00-99	13-14
(2) Second degree indicator: Yes - 1, no - 0	0-1	15
(3) Major - from <u>Sub-Fields List</u>	000-999	16-18
(4) Minor - from <u>Sub-Fields List</u>	000-999	19-21
(5) Institutional Information: Source - <u>Educ. Directory</u>		
(a) Source of control: <u>Educ. Dir. & List #3</u>	0-9	22
(b) Educational level: " " " "	0-9	23
(c) Type of program: " " " "	0-9	24
(d) Enrollment to nearest 100: <u>Educ. Directory</u>	000-999	25-27
(e) Location - state/country: <u>Educ. Dir. & List #1</u>	000-999	28-30
(f) Name: <u>Education Directory</u>	000-999	31-33
(6) Year of degree: code last two digits	00-99	34-35
4b. First Bachelor's Degree		
(1) Degree by initials: <u>List #2b</u>	0-9	36
(2) Second degree indicator: Yes - 1, no - 0	0-1	37
(3) Major: first digit of major field code #'s	0-9	38
(4) Year: code last two digits	00-99	39-40
4c. Second Bachelor's Degree		
(1) Degree by initials: <u>List #2b</u>	0-9	41
(2) Major: <u>Sub-Fields List</u> - first digit of code # for major field	0-9	42
(3) Year	00-99	43-44
4d. First Master's Degree (coded from same sources as b)		
(1) Degree by initials	0-9	45
(2) Second degree indicator	0-1	46
(3) Major	0-9	47
(4) Year	00-99	48-49
4e. Second Master's Degree, if present (coded from same sources as c)		
(1) Degree by initials	0-9	50
(2) Major	0-9	51
(3) Year	00-99	52-53

(Card #1 cont.)

<u>Item</u>	<u>Code</u>	<u>Column #s</u>
4f. Second Doctoral or Professional Degree		
(1) Degree by initials: <u>List #2a</u>	00-99	54-55
(2) Major - from <u>Sub-Fields List</u>	000-999	56-58
(3) Minor - from <u>Sub-Fields List</u>	000-999	59-61
(4) Institutional Information: Source - <u>Educ. Directory</u>		
(a) Source of control: <u>Educ. Dir. & List #3</u>	0-9	62
(b) Educational level: " " " "	0-9	63
(c) Type of program: " " " "	0-9	64
(d) Enrollment to nearest 100: <u>Educ. Directory</u>	000-999	65-67
(e) Location - state/country: <u>Educ. Dir. & List #1</u>	000-999	68-70
(f) Name: <u>Education Directory</u>	000-999	71-73
(5) Year of degree	00-99	74-75

Card #2: Present Degree Program and Professional Identification

Questionnaire Items #5 and #6

<u>Item</u>	<u>Code</u>	<u>Column #s</u>
ID #	00000-99999	1-5
CD #	2	6
5. Present Degree Program (coded from same sources as 4f)		
a. Degree by initials	00-99	7-8
b. Major - from <u>Sub-Fields List</u>	000-999	9-11
c. Minor - from <u>Sub-Fields List</u>	000-999	12-14
d. Institutional Information		
(1) Source of control	0-9	15
(2) Educational level	0-9	16
(3) Type of program	0-9	17
(4) Enrollment to nearest 100	000-999	18-20
(5) Location - state/country	000-999	21-23
(6) Name	000-999	24-26
e. Year of degree	00-99	27-28
6. Professional Identification		
a. Sub-field area: <u>Sub-Fields List</u>	000-999	29-31
b. Sub-field area: " "	000-999	32-34
c. Sub-field area: " "	000-999	35-37
d. Sub-field area: " "	000-999	38-40

Card #2: Employment

29.

Questionnaire Items #7 through #11

Item	Code	Column #s
ID #	00000-99999	1-5
CB #	3	6
7. Employment: Yes = 1, No = 0	1-0	7
8a. First sub-field of employment	000-999	8-10
b. Second sub-field of employment	000-999	11-13
9a. Principal Position		
(1) First or only assignment		
(a) Status: <u>List #4</u>	0-9	14
(b) Title: <u> </u>	00-99	15-16
(c) Institutional type: <u>List #5</u>	0-9	17
(d) Unit type: <u> </u>	0-9	18
(e) Field type: <u> </u>	00-99	19-20
(2) Second Assignment		
(a) Status: <u>List #4</u>	0-9	21
(b) Title: <u> </u>	00-99	22-23
(c) Institutional type: <u>List #5</u>	0-9	24
(d) Unit type: <u>List #5</u>	0-9	25
(e) Field type: <u> </u>	00-99	26-27
(3) Additional Institutional Information		
(a) Source of control: <u>Educ. Dir. & List #3</u>	0-9	28
(b) Educational level: <u> </u>	0-9	29
(c) Educational program: <u> </u>	0-9	30
(d) Enrollment to nearest 100: <u>Educ. Directory</u>	000-999	31-33
(e) Location: <u>List #1</u>	000-999	34-36
b. Second Position		
(1) Status: <u>List #4</u>	0-9	37
(2) Title: <u> </u>	00-99	38-39
(3) Institutional type: <u>List #5</u>	0-9	40
(4) Unit type: <u>List #5</u>	0-9	41
(5) Field type: <u> </u>	00-99	42-43
(6) Source of control: <u>Educ. Dir. & List #3</u>	0-9	44
(7) Educational level: <u> </u>	0-9	45
(8) Educational program: <u> </u>	0-9	46
(9) Enrollment to nearest 100: <u>Educ. Directory</u>	000-999	47-49
(10) Location: <u>List #1</u>	000-999	50-52
10. Number of hours of employment per week	00-99	53-54
11. Percent of time devoted to the following activities:		
a. Administration	000-100	55-57
b. Research	000-100	58-60
c. Teaching	000-100	61-63
d. Other	000-100	64-66
(1) Type of activity: <u>List #5</u> - Up to four activities - code first activity in col. 60 & 61, second activity in col. 62 & 63, etc.	00-99	67-74
(2) Code # of institution of principal position	000-999	75-77
(3) Code # of institution of second position	000-999	78-80

Card #4: Job History

Questionnaire Item #12

<u>Item</u>	<u>Code</u>	<u>Column #s</u>
ID#	00000-99999	1-5
CD#	4	6
12a. Most recent previous position		
(1) Status: <u>List #4</u>	0-9	7
(2) Title: " "	00-99	8-9
(3) Institutional type: <u>List #5</u>	0-9	10
(4) Unit type: <u>List #5</u>	0-9	11
(5) Field type: " "	00-99	12-13
(6) From: code last two digits of year	00-99	14-15
(7) Inclusive number of years:	00-99	16-17
(8) Relation of time of position to times of degrees: <u>List #5</u>	0-9	18
12b. through 12f. Earlier previous positions Code information in same order as 12a., being careful to follow column format.		19-78
12g. Number of positions coded	0-6	79

Card #5: Research Areas

Questionnaire Item #13

<u>Item</u>	<u>Code</u>	<u>Column #s</u>
ID#	00000-99999	1-5
CD#	5	6
13a. Number of presently active research areas listed	0-9	7
b. Number of previously active research areas listed	0-9	8
c. Presently active areas Code up to six in order of presentation.	000-999	9-26
d. Previously active areas Code up to six in order of presentation.	000-999	27-44
e. Four additional presently active areas	000-999	45-56
f. Four additional previously active areas	000-999	57-68

Card #6

Item	Previous Card	Previous Columns	Present Columns
Initial ID#		1-5	1-5
1. Birthdate, year (List #6) ^m	1	7-8(76)	6
2. Birthplace, state or country (List #6)	1	9-11(77)	7
3. Sex (Unchanged) ^m	1	12	8
4a. Highest Level Degree			
a. Degree by initials (Unchanged)	1	13-14	9-10
b. Second degree indicator (Unchanged)	1	15	11
c. Major (Unchanged)	1	16-18	12-14
d. Minor (List #6)	1	19-21	15
e. Institutional information			
(1) Source of control (Unchanged)	1	22	16
(2) Educational level (Unchanged)	1	23	17
(3) Type of program (Unchanged)	1	24	18
(4) Enrollment to nearest 100 (List #6)	1	25-27(78)	19
(5) Location (List #6)	1	28-30(79)	20
f. Year of degree (List #6)	1	34-35(80)	21
4b. First Bachelor's Degree (All items unchanged)			
a. Degree by initials	1	36	22
b. Second degree designator	1	37	23
c. Major	1	38	24
4d. First Master's Degree (All items unchanged)			
a. Degree by initials	1	45	25
b. Second degree designator	1	46	26
c. Major	1	47	27
6. Professional Identification (All items unchanged)			
1. Sub-field area	2	29-31	28-30
2. Sub-field area	2	32-34	31-33
3. Sub-field area	2	35-37	34-36
4. Sub-field area	2	38-40	37-39
8a. First sub-field of employment (Unchanged)	3	8-10	40-42
b. Second sub-field of employment (Unchanged)	3	11-13	43-45
9a. Principal Position (All items unchanged except as noted)			
1. Status	3	14	46
2. Title	3	15-16	47-48

* Indicates reduced coding as found on List #6.
^m Indicates unchanged coding.

Card #6 (cont.)

<u>Item</u>	<u>Previous Card</u>	<u>Previous Columns</u>	<u>Present Columns</u>
3. Institutional type	3	17	49
4. Unit type	3	18	50
5. Field type (<u>List #5</u>)	3	19-20	51
6. Source of control	3	28	52
7. Educational level	3	29	53
8. Educational program	3	30	54
9. Enrollment to nearest 100 (<u>List #5</u>)	3	31-33	55
10. Location (<u>List #5</u>)	3	34-36(21)	56
9b. Second position (All items unchanged except as noted)			
1. Status	3	37	57
2. Institutional type	3	40	58
4. Unit type	3	41	59
5. Field type (<u>List #5</u>)	3	42-43	60
7. Educational level	3	46	61
10. Number of hours of employment per week (<u>List #5</u>)	3	53-54	62
11. Percent of time devoted to the following activities: (<u>All items, List #6</u>)			
1. Administration	3	55-57(22)	63
2. Research	3	58-60(23)	64
3. Teaching	3	61-63(24)	65
4. Other	3	64-66(25)	66
13a. Number of presently active research areas	5	7	67
b. Number of previously active research areas	5	8	68
c. Presently active areas	5	9-11	69-71
" " "	5	12-14	72-74
" " "	5	15-17	75-77
" " "	5	18-20	78-80

Card #7

1. through 12. Same as Card #6	6	1-68	1-68
13d. Previously active areas	5	27-29	69-71
" " "	5	30-32	72-74
" " "	5	33-35	75-77
" " "	5	36-38	78-80

see All coding concerning research areas remained unchanged.

CODING LISTS

LIST #1

GEOGRAPHIC LOCATION

a. Alphabetized List of States

1	Alabama	27	Montana
2	Alaska	28	Nebraska
3	Arizona	29	Nevada
4	Arkansas	30	New Hampshire
5	California	31	New Jersey
6	Colorado	32	New Mexico
7	Connecticut	33	New York
8	Delaware	34	North Carolina
9	District of Columbia	35	North Dakota
10	Florida	36	Ohio
11	Georgia	37	Oklahoma
12	Hawaii	38	Oregon
13	Idaho	39	Pennsylvania
14	Illinois	40	Rhode Island
15	Indiana	41	South Carolina
16	Iowa	42	South Dakota
17	Kansas	43	Tennessee
18	Kentucky	44	Texas
19	Louisiana	45	Utah
20	Maine	46	Vermont
21	Maryland	47	Virginia
22	Massachusetts	48	Washington
23	Michigan	49	West Virginia
24	Minnesota	50	Wisconsin
25	Mississippi	51	Wyoming
26	Missouri		

b. Alphabetized List of Regions Associated with or Administered by the U.S.

55	American Samoa	75	Panama Canal
60	Canton and Enderbury Islands	80	Ryukyu Islands
65	Carolines, Marianas, & Marshall Islands	85	Virgin Islands
70	Guam	90	Wake and Midway Islands
		93	Puerto Rico

(List #1, cont.)

c. Countries of the World

95	Aden	300	Ecuador	510	Liechtenstein
100	Afghanistan	305	El Salvador	515	Luxemburg
105	Albania	310	Estonia	520	Malagasy Republic
110	Algeria	315	Ethiopia	525	Fed. of Malaya
115	Andorra	320	Eritrea	530	Mali
120	Angola	325	Finland	535	Martinique
125	French Antarctica	330	France	540	Mauritania
130	Argentina	335	Futura Islands	545	Mexico
135	Australia	340	Gabon Republic	550	Morocco
140	Austria	345	Gambia	555	Mongolia
145	Bahrain	348	Germany	560	Morocco
150	Belgium	350	East Germany	565	Mozambique
155	Bhutan	355	West Germany	570	Muscat
160	Bolivia	360	Ghana	575	Nepal
165	North Borneo	365	Greece	580	Netherlands
170	Brazil	370	Guadeloupe	585	Nicaragua
175	Brunei	375	British Guiana	590	Niger
180	Bulgaria	380	French Guiana	595	Nigeria
185	Burma	385	Haiti	600	Norway
190	Burundi	390	New Hebrides	605	Oman
195	New Caledonia	395	British Honduras	610	Pacific Islands
200	Cambodia	400	Hong Kong	615	Pakistan
205	Cameroun	405	Hungary	620	Palestine
210	Canada	410	Iceland	625	Panama
215	Central African Republic	415	India	630	Paraguay
220	Ceylon	420	West Indies	635	Peru
225	Chad	425	Indonesia	640	Philippines
230	Chile	430	Iran	645	Poland
235	China	435	Iraq	650	French Polynesia
240	Columbia	440	Ireland	655	Portugal
245	Comoro Islands	445	Israel	660	Qatar
250	Republic of Congo (Brazzaville)	450	Italy	665	Reunion
255	Republic of Congo (Leopoldville)	455	Ivory Coast	670	Federation of Rhodesia and Nyasaland
260	Costa Rica	460	Japan	675	Northern Rhodesia
265	Cuba	465	Jordan	680	Romania
270	Cyprus	470	Kenya	685	Rwanda
275	Czechoslovakia	475	North Korea	690	Ryukyu Is. (Okinawa)
280	Dahomey	480	Republic of Korea (South Korea)	695	Western Samoa
285	Denmark	485	Kuwait	700	San Marino
290	Dodecanese - Crete	490	Leos	705	Sarawak
295	Dominican Republic	495	Lebanon	710	Saudi Arabia
		500	Liberia	715	Senegal
		505	Libya	720	Sierra Leone

(List #1, cont.)

c. Countries of the World (cont.)

725	Singapore	785	Thailand (Siam)	875	U. S. of America
730	Somalia Republic	790	Tibet	880	Uruguay
735	French Somaliland	795	Togo Republic	885	Washington City
740	Republic of S. Africa	800	Tunisia	890	Venezuela
745	South West Africa	805	Turkey	895	Vienna
750	Spain	810	Trust Territories	900	Walla
755	Sudan	815	Uganda	905	Wallis
760	Sweden	820	U. S. S. R.	910	Yemen
765	Switzerland	825	United Arab Republic	915	Yugoslavia
770	Syria	830	United Kingdom (Great Britain & N. Ireland)	920	Zanzibar - Pate
775	Taiwan (Formosa)			925	New Zealand
780	Tanganyika				

ACADEMIC DEGREES

a. Degrees Coded as Highest Level or as Second Doctoral or Professional Degreesb. Degrees Coded as Prior DegreesBACHELOR'S DEGREES

Code #	Degree	Description
10	Foreign Degree at Bach. level	
11	AA	Associated Arts
12	BA (AB)	B. of Arts
13	BAJ	B. of Arts in Journalism
14	BE	B. of Education
15	BFA	B. of Fine Arts
16	BM	B. of Music
17	BPE	B. of Phys. Ed.
18	BS	B. of Science
19	BSS	B. of Soc. Science
20	BTH (THB)	B. of Theology
21	BBA	B. of Business Administration
22	PhB	B. of Philosophy
23	BLS	B. of Library Science

Code #	Degree
0	Foreign Degrees at Bach. level
1	BA, BAJ
2	BBA
3	BE, BPE
4	BFA
5	BM
6	BS, BSS, BLS, MB, BE
7	BTH
8	AA
9	PhB

MASTER'S DEGREES

30	Foreign Degree at M. level	
31	MA (AM)	M. of Arts
32	MBA	M. of Business Ad.
33	MED	M. of Education
34	MM	M. of Music
35	MS	M. of Science
36	MSW	M. of Social Work
37	MRE	M. of Religious Educ.
38	PhM	M. of Philosophy
39	MFA	M. of Fine Arts
40	MSS	M. of Social Science

0	Foreign Degrees at M. level
1	MA
2	MBA
3	ME
4	MFA
5	MM
6	MS, MSS
7	MRE
8	MSW
9	PhM

DOCTORAL DEGREES

50	Foreign Degree at D. level	
51	EdD	D. of Education
52	PhD	D. of Philosophy
53	PEd	D. of Phys. Ed.

PROFESSIONAL DEGREES

70	Foreign Degree at Professional level	
71	BD, STB	B. of Divinity, B. of Sacred Theology
72	DDS	D. of Dental Science
73	DVM	D. of Vet. Med.
74	JD	D. of Jurist
75	LLB	B. of Law
76	MD	D. of Med.
77	MMS	M. of Med. Sc.
78	EDS	(Unspecified)
79	STL	Lecturer in Sacred Theology
80	RN	Registered Nurse
81	STM	M. of Sacred Theology
82	CAS	Certificate of Advanced Studies
83	OD	Doctor of Optometry
84	DS	Doctor of Science

LIST #1

INSTITUTIONAL INFORMATION

a. Control

- 1 C.--City or municipal government--public control
- 2 Church--Refer to abbreviations--denominational control
- 3 Co.--County government--public control
- 4 Dist.--District government--public control
- 5 Nat.--National or Federal Government--public control
- 6 P.--Private; independent of church or state--private control
- 7 Prop.--Proprietary
- 8 St.--State government--public control
- 9 Ter.--Territorial government--public control
- 0 Twp.--Township government--public control

b. Educational Level

- 0 School Systems, all levels
- 1 Pre-school
- 2 Elementary
- 3 Secondary
- 4 Technical Vocational
- 5 Special Adult
- 6 I. 2 but less than 4 years of work beyond the 12th grade
- 7 II. Only the bachelor's and/or first professional degree
- 8 III. Master's and/or second professional degree
- 9 IV. Doctor of philosophy and equivalent degrees

c. Type of Program

- 1 a. Terminal-occupational (below bachelor's degree)
- 1 b. Liberal arts and general
- 2 c. Liberal arts and general, and terminal-occupational
- 3 d. Primarily teacher preparatory
- 4 e. Liberal arts and general, and teacher preparatory
- 5 f. Liberal arts and general, teacher preparatory, and terminal-occupational
- 6 g. Professional
- 7 h. Professional and teacher preparatory
- 8 i. Professional and terminal-occupational
- 9 j. Liberal arts and general with 1 or 2 professional schools
- 0 k. Liberal arts and general with 3 or more professional schools

EMPLOYMENT POSITION INFORMATION

a. Job Status

1	Retired, emeritus	4	Assistant Executive
2	Self-employed	5	Major Staff
3	Executive	6	Minor Staff

b. Types of TitlesExecutive

01	Chairman
02	Chief, (Division of --)
03	Commissioner
04	Coordinator
05	Dean
06	Director
07	Editor
08	Head, Executive Head
09	Head Librarian
10	Manager
11	President
12	Principal
13	Registrar
14	Secretary, Executive Secretary
15	Superintendent
16	Supervisor
17	University or School Examiner

Assistant Executive

01	Assistant or Associate Chairman
02	Assistant Chief
03	Assoc., Asst., or Deputy Commissioner
04	Assistant Coordinator
05	Associate Dean, Assistant Dean
06	Asst. or Assoc. Director
07	Asst. or Assoc. Manager
08	Vice President
09	Assistant Principal
10	Deputy Registrar
11	Assistant Secretary
12	Assistant Superintendent
13	Assistant Supervisor
14	Assistant University or School Examiner
15	Executive Assistant

Major Staff

01	Analyst
02	Assistant Editor
03	Assistant Professor
04	Assistant Psychologist

Major Staff (cont.)

05	Associate
06	Associate Professor
07	Clinical Psychologist
08	Counseling Psychologist
09	Consultant/Advisor
10	Doctor
11	Instructor
12	Lecturer
13	Librarian
14	Professor
15	Psychiatrist
16	Psychiatric Social Worker
17	Psychologist
18	Psychotherapist
19	Research Associate
20	Research Scientist, or Scientist: All fields
21	School Psychologist, Guidance Counselor
22	Social Worker
23	Specialist
24	Staff Psychologist
25	Statistician
26	Teacher
27	Visiting Lecturer
28	Pastor, Asst. Pastor
29	Lawyer
30	Supervisor of Student Teaching
31	Surgeon
32	Historian
33	Journalist
34	Sociologist
35	Engineer
36	Nurse

Minor Staff

01	Assistant Instructor
02	Graduate Assistant
03	Fellow
04	Intern
05	Research Assistant

LIST #5a. Institution Type

- | | |
|---------------------------|--------------------------|
| 1 Clinics | 5 Hospitals |
| 2 Colleges & Universities | 6 Industry |
| 3 Foundations | 7 Professional Societies |
| 4 Governmental Agencies | 8 School Systems |
| | 9 Business |

b. Unit Type

- | | |
|------------------|------------|
| 1 Administrative | 3 Service |
| 2 Research | 4 Teaching |

c. Field Type

- | | | |
|--|----------------|---------------------------|
| 10 Education | 53 Music | 73 Animal Husbandry |
| 20 Psychology | 54 Philosophy | 74 Botany |
| 30 Sociology | 55 Religion | 75 Ecology |
| 41 Anthropology | 61 Astronomy | 76 Entomology |
| 42 Economics | 62 Chemistry | 77 Genetics |
| 43 Geography | 63 Engineering | 78 Horticulture |
| 44 History | 64 Geology | 79 Medicine & Surgery |
| 45 Political Science | 65 Mathematics | 80 Microbiology |
| 46 Speech | 66 Meteorology | 81 Nutrition & Metabolism |
| 51 Art | 67 Physics | 82 Pathology |
| 52 Language, Literature &
Language Arts | 71 Agronomy | 83 Pharmacology |
| | 72 Anatomy | 84 Physiology |
| | | 85 Zoology |

d. Activity Types

Administrative:

- 01 Committee work, study groups
- 02 Institutional research
- 03 Record keeping and data processing
- 04 Special assignments

Advising & Supervision of students:

- 05 Undergraduate
- 06 Graduate
- 07 Both
- 08 Consulting
- 09 Counseling and therapy
- 10 Curriculum & course development
- 11 Field service

- 12 Professional society duties: offices, committees
- 13 Professional growth: reading, study, attending conventions & meetings
- 14 Research planning & development: proposal writing, bibliographical work
- 15 Student teacher supervision
- 16 Writing
- 17 Miscellaneous responsibilities
- 18 Supervision - any kind other than #15

e. Relation of Time of Position to Times of Degrees

- | | |
|-------------------------------|--|
| 1 Pre-Bachelors | 5 Between Masters & Professional or Doctoral |
| 2 Post-Bachelors | 6 Post Professional or Doctoral |
| 3 Between Bachelors & Masters | 7 During graduate work |
| 4 Post Masters | |

LIST #6REDUCED CODING SYSTEMS FOR CERTAIN ITEMS
TRANSFERRED INTO CARD #61. Birthdate

Up to 1895 - 0
 1896 to 1900 - 1
 1901 to 1905 - 2
 1906 to 1910 - 3
 1911 to 1915 - 4

1916 to 1920 - 5
 1921 to 1925 - 6
 1926 to 1930 - 7
 1931 to 1935 - 8
 1936 to 1940 - 9

2. Birthplace - Location

New England - 0
 Maine
 New Hampshire
 Vermont
 Massachusetts
 Rhode Island
 Connecticut

Middle Atlantic - 1
 New York
 New Jersey
 Pennsylvania

East North Central - 2
 Ohio
 Indiana
 Illinois
 Michigan
 Wisconsin

West North Central - 3
 Minnesota
 Iowa
 Missouri
 North Dakota
 South Dakota
 Nebraska
 Kansas

South Atlantic - 4
 Delaware
 Maryland
 Dist. of Columbia
 Virginia
 West Virginia
 North Carolina
 South Carolina
 Georgia
 Florida

East South Central - 5
 Kentucky
 Tennessee
 Alabama
 Mississippi

West South Central - 6
 Arkansas
 Louisiana
 Oklahoma
 Texas

Mountain - 7
 Montana
 Idaho
 Wyoming
 Colorado
 New Mexico
 Arizona
 Utah
 Nevada

Pacific - 8
 Washington
 Oregon
 California
 Alaska
 Hawaii

Territories and
 Foreign Countries - 9

LIST #6 (Cont.)3. Minor

Education	- 0	Humanities	- 5
Educational Subject Areas	- 1	Physical Sciences	- 6
Psychology	- 2	Biological Sciences	- 7 & 8
Sociology	- 3	Other	- 9
Other Social Sciences	- 4		

4. Enrollment

0 to 1,000	- 0	10,001 to 15,000	- 5
1,001 to 2,500	- 1	15,001 to 20,000	- 6
2,501 to 5,000	- 2	20,001 to 25,000	- 7
5,001 to 7,500	- 3	25,001 to 30,000	- 8
7,501 to 10,000	- 4	30,001 up	- 9

5. Year of Degree

Up to 1920	- 0	1941 to 1945	- 5
1921 to 1925	- 1	1946 to 1950	- 6
1926 to 1930	- 2	1951 to 1955	- 7
1931 to 1935	- 3	1956 to 1960	- 8
1936 to 1940	- 4	1961 to 1965	- 9

6. Field Type

Education	- 1	Humanities	- 5
Psychology	- 2	Physical Sciences	- 6
Sociology	- 3	Biological Sciences	- 7 & 8
Other Social Sciences	- 4		

7. Number of Hours of Employment per Week

0 to 9	- 0	50 to 59	- 5
10 to 19	- 1	60 to 69	- 6
20 to 29	- 2	70 to 79	- 7
30 to 39	- 3	80 to 89	- 8
40 to 49	- 4	90 to 99	- 9

8. Percentage of Time

00% to 09%	- 0	50% to 59%	- 5
10% to 19%	- 1	60% to 69%	- 6
20% to 29%	- 2	70% to 79%	- 7
30% to 39%	- 3	80% to 89%	- 8
40% to 49%	- 4	90% to 100%	- 9

CHAPTER III

DATA SUMMARIZING ITEMS OF INFORMATION FOR THE TOTAL ANALYSIS GROUP

The discussion in the previous chapter indicated that the analysis of National Register data was undertaken in two phases, the first phase of which involved obtaining frequency counts of responses for each item of information as listed on the data card formats, Card #1 through Card #5 (pages 37 through 40). Data from the more important distributions thus derived will be presented in this chapter. Results from the second phase of the analysis have led to some selected subgroup comparisons which will be presented in Chapter IV.

As the reader may have already noted, there is a great deal of information contained in the tables presented on the following pages. It will of course be impossible to cover all of these data in detail. Instead, the intent of the discussion is to review each table briefly, and to bring to the reader's attention some of the more important results. Before beginning, a brief review of general design of the tables is in order. Table I, page 65, deals with personal vita; Table II, pages 66 through 72, deals with educational history data; Table III, pages 73 through 77, with professional identification data; Table IV, pages 78 through 85, with employment data; and Table V, pages 86 through 90, with research areas data.

PERSONAL VITA

Table I, page 65, provides a summary of personal vita. In reviewing data from this table, the following general characteristics of the

analysis group may be cited. The average age of the respondents is 45.4 years with the age distribution extending from 25 years up to the middle 90's. Concerning birthplace, a majority of individuals come from the heavily populated Northeast and Northcentral states extending from Massachusetts and New Jersey to Minnesota and Missouri. It is also interesting to note the number of individuals who were born in foreign countries, and the particular distribution of countries most often indicated.

EDUCATIONAL HISTORY

Table 11, beginning on page 66, contains a summary of educational history data. As discussed in the previous chapter (page 38), the highest level degree was chosen as a major classification for all respondents. In Item 1, the distribution of degrees by highest level is as follows: 82.3% are at the doctoral level, 16% at the master's level, and combination of 1.7% at the bachelor's and professional levels. The major types of degrees at the bachelor's and master's levels are in arts, science, and education. Fifty-eight and seven-tenths percent of all degrees are doctorates in philosophy, and 23.4% are doctorates in education.

Item 2, page 66, contains distributions for all bachelor's and master's degrees. The major types of degrees are again in arts, science, and education.

Item 3, page 67, contains distributions for academic fields of majors and minors of highest level degrees. Item 4, page 67, contains distributions for majors of degrees at all levels. Perhaps the major features of these items is that education, with the exception of degrees at the master's level, consistently accounts for less than half of all

degree majors. Psychology is the next largest field, and at the doctoral level surpasses education by a small percentage. It is interesting to note that at the bachelor's level the distribution is a little more evenly spread among the non-education areas, while at the master's and doctoral levels the majors concentrate more and more in education and psychology. These data clearly demonstrate the diverse academic backgrounds of those persons who can be identified as educational researchers.

Item 5, pages 68 through 71, contains distributions for sub-fields of majors and minors of highest level degrees. It must be noted, first, that 37.9 percent of all individuals did not specify the sub-field of their major. Of those who did, educational administration is the largest category, followed by educational psychology, educational subject matter areas, guidance, counseling psychology, etc.

The classification, in Item 5, of educational psychology under the field of psychology, is one factor which influences the rather even distribution of highest level degrees between education and psychology as found in Item 3. Educational psychology was classified in this manner because the sources utilized in identifying names provided substantially more evidence of this area's association with the field of psychology than with education. It is clear, however, that this may be interpreted as a somewhat arbitrary decision. The area of educational psychology does reflect a spectrum of professional interest involving both education and psychology. An inspection of the questionnaires of individuals listing educational psychology as a highest level degree major, indicates that the educational backgrounds and professional orientations of these persons vary from being clearly within the field of education,

to being a more or less even balance between education and psychology, to being clearly within the field of psychology. In this regard it is interesting to note that 22% (184) of the individuals listing the Ed.D. as the highest level degree also list psychology as the degree major. If educational psychology were either transferred to education or were kept as an independent classification, the distribution of degree majors among academic fields would then shift in favor of education.

One of the most surprising features of Item 5 is that only 38 individuals or approximately 1% of the total group indicated educational research as a degree major. This, of course, does not constitute the total number of persons whose graduate studies may have been focused primarily upon training for research in education. A more accurate indication of the number of such persons may be gained by combining frequencies from those areas which have a clear orientation toward research in education. Educational psychology and educational sociology would have to be included in addition to educational research. The total thus derived includes less than 20% of the researcher population as represented by the analysis group. This does not mean that individuals majoring in other areas may not have had research training but it seems unlikely that such individuals could have concentrated on research as much as those individuals whose areas were research oriented. These data then seem to indicate that a substantial majority of identified researchers did not focus primary attention upon preparation for research as graduate students.

Item 6, page 72, contains a distribution of the years of highest level degree. The earliest degree was obtained in 1901, with a steadily

increasing number of degrees obtained during each five year period through 1960. The highest single frequency of degrees occurred in 1958, with the median group of degrees occurring in 1953.

Item 7, page 72, contains information concerning the institutions from which the highest level degrees were obtained. It should be mentioned at this point that much of the information presented in this item was not provided on the questionnaires by the respondents, but was obtained through reference to the Education Directory, Part III, Higher Education, 1963. A review of Item 7 indicates that state universities account for 52.8% of all degrees, with private institutions not too far behind with 42.5%. These two types of institutions account for 95.3% of all highest level degrees granted. It may also be noted that 96.4% of all degrees were received from institutions that grant doctoral degrees. Since most of the highest level degrees are at the doctoral level, this should not be surprising. It would also be expected that a majority of the master's degrees and certainly some of the bachelor's degrees would also have been granted from such institutions. Enrollment data show a steady progression toward larger schools, which in most cases are probably doctorate granting institutions. Location of institution data show dominance by the Northeast and Northcentral areas of the country.

PROFESSIONAL IDENTIFICATION

Table III, beginning on page 73, contains a summary of professional identification data. Respondents to the questionnaire were permitted to indicate as many as four sub-field areas of professional identification, and were asked to list these areas in order of importance. The Sub-Fields List, described in Chapter I (page 11), was provided as a

reference for this purpose. Item 1, on page 73, contains distributions for academic fields for all four choices of professional identification. It may be noted that education accounts for 51.5% of all first choices, psychology 39.7%, and sociology 5%, with the remainder of choices scattered among other fields. A review of second, third, and fourth choices indicates a steady, though not large, decrease in education, with a corresponding increase in psychology and sociology. If the first choice of professional identification is compared with distributions of majors for highest levels degrees, an increase of 5.7% is found in responses in education indicating a slight shift in identification from other areas to education between the time of the highest level degree and the present.

Item 2, on pages 79 through 82, contains distributions for subfields of professional identification. A review of the data for the first choice indicates, as in the case of majors of degrees, that educational research accounts for a relatively small percentage of choices. The largest single category is educational administration, which is followed in order by: educational subject areas, educational research, educational psychology, guidance, school psychology, elementary education, etc.

If, as with majors of degrees, those areas are considered which are obviously research oriented, such as educational research, educational psychology, and educational sociology, the proportion of the analysis group involved is again less than 20%. This indicates that a large majority of researchers identify themselves in other than specifically research areas. If this situation means that all areas in

education are therefore permeated with researchers and research activities, it may be looked upon as a fortunate circumstance. If, on the other hand, research occupies a relatively minor position in the total activities of a majority of researchers, then there may be substantial cause to think otherwise.

PRESENT EMPLOYMENT

Table IV, beginning on page 78, contains the distributions of responses for major fields of employment. These data come from the questionnaire item in which individuals were asked to indicate the first and second sub-fields in which they are employed. Data in Item 1, page 78, indicates that education accounts for 55.7% of all responses, psychology for 35.6% and sociology 5%, with the remainder of choices being scattered among other fields. The grand total of choices reflects essentially the same distribution. When compared to degree major and sub-fields of professional identification distributions, these data indicate that there is a steady movement of persons from other fields into the field of education.

Item 2, pages 79 through 82, contains distributions for sub-fields of employment. A review of data for the first choice indicates that educational administration is the largest single category, followed by educational research, education subject matter areas, educational psychology, clinical psychology, counseling psychology, guidance, school psychology, curriculum, elementary education, etc. Individuals in those areas which are primarily concerned with research again account for less than 20% of the total group.

Item 3, page 83, contains a variety of information concerning the positions individuals hold and the institutions in which they are

employed. Regarding employment status, 58.5% of the respondents are employed primarily in major staff capacities, that is, in non-administrative professional positions. Thirty-three and two-tenths per cent of the group are employed primarily in executive positions. Small proportions of the total group are retired, self-employed, or employed in assistant executive or minor staff positions.

Concerning the type of institution of employment, it may be noted that 64.3% of the analysis group is employed in colleges and universities, followed by 16.1% in school systems, 3.2% in foundations, etc.

Under type of unit, an attempt was made to classify the types of institutional units in which individuals were employed. It is especially noteworthy that only 7.8% of the group is employed in research units. In contrast, teaching units employed 43.5% of the group, administrative units 39.2%, and service units 9.5%.

The major field with which the institutional unit of employment is associated was also recorded. Educational units account for 75.5% of the employing institutions of the group. This figure indicates that the field of education employs many research oriented individuals whose training and subsequent professional identification are in other fields.

Concerning location of employing institutions, a more even distribution of responses is found among the geographical regions than with birthplace or location of institution of graduate training, although the greatest concentration is again in the Middle Atlantic and East-Northeastern regions.

Item 4, page 84, contains the distribution for the number of hours per week devoted to professional activities. The range of this

distribution extends from zero to rather surprising figures in the 80's and 90's. The mean number of hours is 46.4.

Item 5, page 84, contains distributions for percent of hours per week devoted to administration, research, teaching, and "other" activities. Those activities most often specified under "other" are listed in Item 7, on page 85. The following statements may be made concerning the distributions in Item 5:

1. There are a great many people who indicated no time devoted to administration, teaching or other activities.
2. Almost everyone indicated some time devoted to research, although the majority of the professed amounts are on the lower range of the scale.
3. The distributions are skewed toward the lower portion of the scale, with distribution for research being the most heavily skewed.
4. The distributions are erratic, with alternating high and low points.

These statements suggest that educational researchers are a heterogeneous group with respect to the activities to which they devote their time. Any attempt to portray typical patterns of activities must be undertaken with caution. In Item 6 (page 84), an attempt has been made through the use of median percents of time, to compare the relative emphases which these activities bear within the analysis group. In view of the very large numbers of persons who indicated no time devoted to several of the activities, it was decided that the medians should be based only upon those persons who indicated some time devoted to each activity. Furthermore, observations of questionnaire responses under research areas in relation to percent of time devoted to research, indicate that many persons are now engaged only in research related activities

Involving small amounts of time. This situation is reflected in the distribution for percent of time devoted to research in which the 1% to 10% category contains the single largest frequency. It was therefore clear that median figures derived even after the deletion of all zero percent of time responses, might still not provide accurate comparisons of concentration upon the various activities.

With these considerations in mind it was decided to present three sets of median figures for the percent of time distributions. The first includes all persons in each distribution who indicated 1% or more of time devoted to that activity. In the second set of medians, one-tenth time or less was taken as a cut-off point that would eliminate a majority of those persons who give only cursory attention to these activities. Considering one eight-hour day out of a forty-hour work week as representing a minimum amount of genuine concentration on each activity, the third set of figures was obtained by including only those persons who list 20% or more time. The second and third sets of figures thus show the median amounts of time devoted by the remaining groups of individuals under each distribution.

In all of the sets of figures described above, research is associated with the smallest median. Furthermore, the differences between median amounts of time devoted to research and to other activities is greatest when those persons listing only small amounts of time are deleted from the distributions. From all three sets of medians, and especially from the second and third sets in which more realistic amounts of time are considered, it is clear that individuals in the analysis group devote less time to research than to administration, teaching or

other activities. This conclusion may be further substantiated by examining the actual frequencies within the distribution for percent of time devoted to research. Within this distribution, 50% of all individuals in the analysis group fall at or below the 20% of time level, while at the 50% of time level, 85% of all individuals are included. Only 3.1% of the total analysis group devotes full time to research. The question may well be asked as to whether or not the amount of concentration upon research as represented by these data is at all adequate in terms of the problems now facing education.

RESEARCH AREAS

Table 5, on pages 86 through 90, contains distributions for all research areas listed by respondents to the National Register Questionnaire. As described in Chapter I the Research Areas List (page 14) was circulated with the questionnaire as a reference from which responses could be selected. The respondents were allowed space on the questionnaire to list up to six areas, and were asked to distinguish between areas in which they are presently active and areas in which they have been active in the past. The totals and percents of the major divisions of the list are given in Table 5. Those research areas grouped under the heading of the teaching-learning process received the greatest number of responses. Curriculum comes next, followed by administration, testing and measurement, guidance, educational research as an activity, personnel, other unclassified areas, historical development of education, and goals and function of education. The ten individual research areas listed most often included: (1) teacher education, (2) learning behavior, (3) secondary education, (4) academic achievement, (5) drop-outs and attrition, (6) organizational patterns of educational

institutions, (7) development of educational research, (8) elementary curriculum, (9) teaching machines and programmed learning, (10) dissemination of knowledge and techniques. Altogether, there are sixty-two areas with one hundred or more responses out of a total of one-hundred and eighty-two research areas. From these data, it may be concluded that researchers in education are concerned with a wide variety of research areas, many of which are interdisciplinary in nature.

From this review of data, it is possible to characterize educational researchers as follows:

1. In a majority of cases, they did not receive their primary training in research.
2. In a majority of cases, they do not identify themselves professionally in areas that are primarily oriented toward research.
3. Again in a majority of cases, they are not employed primarily as researchers.
4. They devote a median amount of 25% of their time to research.
5. They have a wide variety of research interests and roles.

In summary then, it may be noted that educational researchers are professional men in one of several possible academic fields who have received varying amounts and types of training in research, and who devote equally varying, but usually small, amounts of time to a variety of research activities and roles.

Two important conclusions may be drawn from these data. First, it seems clear that the profession of education, for whatever reasons, has failed to give adequate support to the development of research, either as a professional activity or in terms of training for research at the

graduate level. Second, it is also clear that a need exists for penetrating thought, for careful research, and for effective action relative to the problems which surround the training and nurture of educational researchers.

TABLE I
SUMMARY OF PERSONAL VITA

Total Analysis Group = 3923; Total Responses Vary per Item

1. Sex:	Total Responses		Total Responses		Total Responses		Total Responses		Total Responses		Total Responses	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Total	3325	579	3904	100	3904	100	3904	100	3904	100	3904	100
%	85.2	14.8										
2. Age:	25-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75	76-	Total Responses
Total	102	518	773	716	623	490	326	205	67	32	18	3870
%	2.6	13.4	20.0	18.5	16.1	12.7	8.4	5.3	1.7	.8	.5	100
Mean Age =	45.4											
3. Birthplace: Distributions by Regions, States, and Countries												
Region and State	Total	%	Region and State	Total	%	Region and State	Total	%	Region and State	Total	%	Total Responses
New England	270	7.0	South Atlantic	241	6.2	Mountain	164	4.2				3861
Maine	9	.2	Delaware	5	.1	Montana	14	.4				100%
New Hampshire	16	.4	Maryland	35	.9	Idaho	28	.7				
Vermont	12	.3	Dist. of Columbia	20	.5	Wyoming	8	.2				
Massachusetts	148	3.8	Virginia	44	1.2	Colorado	54	1.4				
Rhode Island	19	.5	West Virginia	29	.7	New Mexico	8	.2				
Connecticut	66	1.8	North Carolina	30	.8	Arizona	6	.2				
Middle Atlantic	986	25.5	South Carolina	12	.3	Utah	43	1.1				
New York	611	15.8	Georgia	32	.8	Nevada	3	.1				
New Jersey	101	2.6	Florida	34	.9							
Pennsylvania	274	7.1										
E. North Central	871	22.6	E. South Central	120	3.1	Pacific	207	5.4				
Ohio	212	5.5	Kentucky	36	1.0	Washington	48	1.2				
Indiana	104	2.7	Tennessee	34	.9	Oregon	35	.9				
Illinois	246	6.4	Alabama	33	.8	California	118	3.1				
Michigan	173	4.5	Mississippi	17	.4	Alaska	-	-				
Wisconsin	136	3.5				Hawaii	6	.2				
W. North Central	608	15.7	W. South Central	173	4.5	Foreign Countries	221	5.8				
Minnesota	131	3.4	Arkansas	21	.5	Austria	20	.5				
Iowa	126	3.3	Louisiana	27	.7	Canada	56	1.5				
Missouri	125	3.2	Oklahoma	37	1.0	Germany	24	.6				
North Dakota	38	1.0	Texas	88	2.3	Poland	16	.4				
South Dakota	28	.7				U.S.S.R.	12	.3				
Nebraska	86	2.2				United Kingdom	16	.4				
Kansas	74	1.9				Other Countries	77	2.0				

TABLE 11
SUMMARY OF EDUCATIONAL HISTORY DATA
 Total Analysis Group = 3923; Total Responses Vary per Item

1. Highest Level Degrees:											
Bachelor's				Master's				Doctoral			
Degree	Total	%		Degree	Total	%		Degree	Total	%	
Foreign	1	<.1		Foreign	1	<.1		Foreign	2	.1	
Associated				M. of Arts	367	9.4		D. of Educ.	915	23.4	
Arts	4	.1		M. of Bus. Adm.	2	.1		D. of Phil.	2296	58.7	
B. of Arts	21	.5		M. of Educ.	109	2.8		D. of Phys. Educ.	3	.1	
B. of Bus. Adm.	1	<.1		M. of Music	1	<.1					
B. of Educ.	1	<.1		M. of Science	127	3.2					
B. of Fine Arts	1	<.1		M. of Social Work	18	.5					
B. of Music	1	<.1		M. of Relig. Educ.	1	<.1					
B. of Science	4	.1									
B. of Theology	1	<.1									
Total	35	.9		Total	626	16.0		Total	3216	82.3	
								Total	32	.8	

2. Types of All Degrees at Bachelor's and Master's Levels:											
<u>Bachelor's</u>						<u>Master's</u>					
Degree	Total	%		Degree	Total	%					
Foreign	13	.3		Foreign	9	.2					
Associated Arts	7	.2		M. of Arts	2395	66.6					
B. of Arts	2223	57.9		M. of Bus. Adm.	4	.1					
B. of Bus. Adm.	13	.3		M. of Educ.	448	12.5					
B. of Educ.	80	2.1		M. of Fine Arts	-	-					
B. of Fine Arts	6	.2		M. of Music	23	.6					
B. of Music	11	.3		M. of Science	696	19.4					
B. of Science	1468	38.2		M. of Relig. Educ.	4	.1					
B. of Theology	5	.1		M. of Soc. Work	6	.2					
B. of Philosophy	14	.4		M. of Philosophy	10	.3					
Total	3840	100.		Total	3595	100.					

TABLE II, Cont'd.
SUMMARY OF EDUCATIONAL HISTORY DATA
Total Analysis Group = 3923; Total Responses Vary per Item

3. Major and Minor Fields of Highest Level Degrees:									
Major: Total %	Education	Psychology	Sociology	Other Social Sciences	Humanities	Physical Sciences	Biological Sciences	Total Responses	
	1770 45.8	1680 43.5	192 5.0	83 2.1	63 1.6	33 .9	40 1.0	3861 100	
Minor: Total	884 38.4	866 37.6	150 6.5	185 8.0	103 4.5	53 2.4	60 2.6	2301 100	
4. Majors of Degrees by all Levels:									
Bachelor's: Total %	Education	Psychology	Sociology	Other Social Sciences	Humanities	Physical Sciences	Biological Sciences	Total Responses	
	1408 37.7	823 22.0	166 4.4	427 11.4	384 10.3	396 10.6	133 3.6	3737 100	
Master's Total %	1872 51.8	1217 33.6	166 4.6	139 3.8	111 3.1	69 2.0	41 1.1	3615 100	
Doctoral: Total %	1432 45.1	1449 45.8	174 5.5	49 1.5	40 1.3	17 .5	11 .3	3172 100	
Professional: Total %	1 3.1	-	-	-	6 18.8	1 3.1	24 75.0	32 100	

TABLE 11, Cont'd.
SUMMARY OF EDUCATIONAL HISTORY DATA
Total Analysis Group = 3923; Total Responses Vary per Item

5. Sub-field Majors and Minors of Highest Level Degrees

	Major		Minor	
	Total	%	Total	%
<u>Education</u>				
Adult Education	7	.2	1	<.1
Comparative Education	4	.1	2	.1
Curriculum and Methods	93	2.4	64	2.8
Education (unspecified)	485	12.6	217	9.4
Educational Administration	449	11.6	134	5.8
Educational Communications	2	.1	2	.1
Educational Foundations	16	.4	8	.3
Educational Research	38	1.0	35	1.5
Educational Subject Areas	197	5.1	135	5.9
Elementary Education	82	2.1	51	2.2
Guidance and Counseling	152	3.9	81	3.5
Higher Education	22	.6	28	1.2
History of Education	19	.5	9	.4
International Education	-	-	-	-
Mental Retardation	2	.1	2	.1
Parent Education	1	<.1	1	<.1
Philosophy of Education	55	1.4	32	1.4
Pre-school Education	3	.1	-	-
Rural Education	-	-	-	-
Secondary Education	75	1.9	33	1.4
Special Education	39	1.0	28	1.2
Teacher Education	21	.5	10	.4
Teaching Media	8	.2	11	.5
Urban Education	-	-	-	-
<u>Educational Subject Areas</u>				
Agricultural Education	7	.2	4	.2
Art Education	7	.2	1	<.1
Business Education	-	-	2	.1
Conservation Education	-	-	-	-
Consumer Education	-	-	1	<.1
Educational Subject Area (unspecified)	5	.1	3	.1
English/Literature & Drama	24	.6	23	1.0
Foreign Languages & Literature	1	<.1	3	.1
Geography	-	-	1	<.1
History	1	<.1	4	.2
Home Economics	16	.4	2	.1
Hygiene Education	8	.2	2	.1
Industrial & Technical Education	8	.2	2	.1
Mathematics	14	.4	12	.5
Medical Education	-	-	-	-
Music Education	7	.2	1	<.1
Performing Arts Education	-	-	-	-
Physical Education	13	.3	9	.4
Reading	17	.4	8	.4
Rehabilitation	4	.1	2	.1
Religious Education	-	-	2	.1
Safety-driver Education	-	-	1	<.1
Science Education	20	.5	11	.5
Social Studies	10	.3	24	1.1
Speech Education - Hearing	18	.5	7	.3
Teaching-media Education	2	.1	1	<.1
Vocational Education	14	.4	7	.3

TABLE 11, Cont'd.
 SUMMARY OF EDUCATIONAL HISTORY DATA
 Total Analysis Group = 3923; Total Responses Vary per Item

5. Sub-field Majors and Minors of Highest Level Degrees, Cont'd.

	Major		Minor	
	Total	%	Total	%
<u>Psychology</u>				
Clinical Psychology	98	2.5	34	1.5
Comparative Psychology	1	<.1	-	-
Counseling and Guidance	109	2.8	47	2.0
Data Processing & Computation	1	<.1	-	-
Developmental Psychology	57	1.5	29	1.3
Educational Psychology	440	11.4	175	7.6
Evaluation, Measurement, Testing	72	1.9	63	2.7
Experimental Psychology	22	.6	7	.3
General Psychology	3	.1	10	.4
Human Engineering	-	-	-	-
Human Relations	3	.1	1	<.1
Industrial & Personnel Psychology	14	.4	24	1.0
Learning	1	<.1	1	<.1
Mathematics of Resource Use	-	-	-	-
Military Psychology	-	-	-	-
Personality Psychology	-	-	3	.1
Physiological Psychology	-	-	5	.2
Psycholinguistics	2	.1	1	<.1
Psychology (unspecified)	800	20.7	354	15.5
Psychometrics	2	.1	2	.1
Psychotherapy, Group Therapy	-	-	-	-
Role Theory	-	-	-	-
School Psychology	10	.3	2	.1
Social Psychology	35	.9	40	1.7
Statistics & Probability	10	.3	67	2.9
Theory & Practice of Computation	-	-	-	-
<u>Sociology</u>				
Applied Sociology	3	.1	7	.3
Community and Urban Sociology	-	-	-	-
Criminology and Deviance	-	-	1	<.1
Ecology & Demography	-	-	1	<.1
Educational Sociology	10	.3	9	.4
Family	2	.1	3	.1
General Sociology	-	-	-	-
Industrial Sociology	1	<.1	1	<.1
Medical Sociology	1	<.1	-	-
Research Methodology & Technology	-	-	-	-
Rural-Urban Sociology	9	.2	5	.2
Social Change & Development	-	-	-	-
Social Conflict	-	-	-	-
Social Organization	-	-	2	.1
Sociological Theory	1	<.1	-	-
Sociology (unspecified)	165	4.3	121	5.3
Sociology of Religion	-	-	-	-

TABLE 11, Cont'd.
SUMMARY OF EDUCATIONAL HISTORY DATA
Total Analysis Group = 3923; Total Responses Vary per Item

5. Sub-field Majors and Minors of Highest Level Degrees, Cont'd.

	Major		Minor	
	Total	%	Total	%
<u>Other Social Sciences</u>				
Accounting	2	.1	-	-
Anthropology	7	.2	43	1.5
Business Administration	-	-	1	<.1
Business Law	-	-	-	-
Business Organization	2	.1	1	<.1
Economics	17	.4	47	2.1
Geography	-	-	1	<.1
History	13	.3	38	1.7
Management	4	.1	4	.2
Marketing	1	<.1	-	-
Military Science	-	-	-	-
Other Social Sciences (unspecified)	4	.1	18	.8
Political Science	15	.4	19	.8
Public Administration	2	.1	2	.1
Speech	16	.4	11	.5
<u>Humanities</u>				
Art	1	<.1	4	.2
Humanities (unspecified)	2	.1	1	<.1
Journalism	2	.1	1	<.1
Language, Literature, & Language Arts	16	.4	19	.8
Law	5	.1	3	.1
Liberal Arts	-	-	-	-
Library Science	3	.1	2	.1
Music	-	-	5	.2
Philosophy	28	.7	67	2.9
Religion	5	.1	1	<.1
<u>Physical Sciences</u>				
Astronomy	1	<.1	-	-
Chemistry	4	.1	7	.3
Engineering	3	.1	1	<.1
Geology	1	<.1	-	-
History & Philosophy of Science	-	-	2	.1
Industrial Arts	-	-	-	-
Industrial Research	-	-	-	-
Mathematics	24	.6	35	1.5
Metorology	-	-	-	-
Operation Research	-	-	-	-
Physical Sciences (unspecified)	-	-	1	<.1
Physics	-	-	7	.3

TABLE 11, Cont'd.
 SUMMARY OF EDUCATIONAL HISTORY DATA
 Total Analysis Group = 3923; Total Responses Vary per Item

5. Sub-field Majors and Minors of Highest Level Degrees, Cont'd.

	<u>Major</u>		<u>Minor</u>	
	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>
<u>Biological Sciences</u>				
Agronomy	-	-	-	-
Anatomy	-	-	3	.1
Animal Husbandry	-	-	-	-
Biological Sciences (unspecified)	2	.1	11	.5
Botany	2	.1	1	<.1
Ecology	-	-	-	-
Entomology	-	-	-	-
Genetics	-	-	-	-
Horticulture	-	-	-	-
Medicine & Surgery	20	.5	1	<.1
Microbiology	-	-	1	<.1
Nursing	5	.1	1	<.1
Nutrition & Metabolism	2	.1	1	<.1
Pathology	3	.1	2	.1
Pharmacology	-	-	-	-
Physiology	1	<.1	15	.7
Psychiatric Administration	-	-	-	-
Psychiatry	-	-	14	.6
Science Manpower	-	-	-	-
Zoology	3	.1	6	.3
<u>Other Major Field</u>				
Other Major Field (unspecified)	1	<.1	-	-
Science	1	<.1	4	.2

TABLE II, Cont'd.
SUMMARY OF EDUCATIONAL HISTORY DATA
Total Analysis Group = 3923; Total Responses Vary per Item

6. Year of Highest Level Degree:												
		1901-10	1911-20	1921-25	1926-30	1931-35	1936-40	1941-45	1946-50	1951-55	1956-60	1961-64
Total	%	1	18	19	90	151	201	234	547	980	1063	596
		.1	.5	.5	2.3	3.9	5.2	6.0	14.0	25.1	27.3	15.3

7. Institutional Data of Highest Level Degree:								
Source of Control:		City	Church	National	Private	State	Territorial	Total Responses
Total	%	31	146	1	1646	2046	4	3874
		.8	3.8	-	42.5	52.8	.1	100

Educational Level:		Bach. or 1st Prof. Degree	Master's or 2nd Prof. Degree	Doctoral Degree
Total	%	16	123	3733
		.4	3.2	96.4

Enrollment:		0-1,000	1,100-2,500	2,600-5,000	5,000-7,500	7,600-10,000
Total	%	17	88	108	116	529
		.4	2.3	2.8	3.0	13.7

Total		10,000-15,000	15,100-20,000	20,100-25,000	26,100-30,000	30,100-
	%	660	484	721	251	898
		17.0	12.5	18.6	6.5	23.2

Location:		New England	Middle Atlantic	E. North Central	W. North Central	South Atlantic
Total	%	278	1044	1088	466	232
		7.1	26.7	27.8	11.9	5.9

Total		E. South Central	W. South Central	Mountain	Pacific	Foreign Countries
	%	104	131	136	381	50
		2.7	3.4	3.5	9.7	1.3

Total											
	%	3910									
		100									

TABLE III
SUMMARY OF PROFESSIONAL IDENTIFICATION DATA
Total Analysis Group = 3923; Total Responses Vary per Item

I. Major Fields of Professional Identification:

	<u>Education</u>	<u>Psychology</u>	<u>Sociology</u>	<u>Other Social Sciences</u>	<u>Humanities</u>	<u>Physical Sciences</u>	<u>Biological Sciences</u>	<u>Total Responses</u>
<u>1st Choice</u>								
Total	2016	1552	196	55	42	10	40	3911
%	51.5	39.7	5.0	1.4	1.1	.3	1.0	100
<u>2nd Choice</u>								
Total	1820	1572	250	56	58	18	31	3805
%	47.8	41.3	6.6	1.5	1.5	.5	.8	100
<u>3rd Choice</u>								
Total	1652	1414	231	61	45	27	17	3447
%	47.9	41.0	6.7	1.8	1.3	.8	.5	100
<u>4th Choice</u>								
Total	1206	1142	226	61	66	36	31	2768
%	43.6	41.2	8.2	2.2	2.4	1.3	1.1	100
<u>Grand Total</u>	6694	5680	903	253	211	91	119	13,931
%	48.1	40.8	6.5	1.7	1.5	.6	.8	100

TABLE III, Cont'd.
SUMMARY OF PROFESSIONAL IDENTIFICATION DATA
Total Analysis Group = 3923; Total Responses Vary per Item

2. Sub-fields of Professional Identification:

	1st Choice		2nd Choice		3rd Choice		4th Choice	
	Total	%	Total	%	Total	%	Total	%
<u>Education</u>								
Adult Education	27	.7	19	.5	36	1.0	36	1.3
Comparative Education	14	.4	14	.4	22	.6	27	1.0
Curriculum and Methods	176	4.5	209	5.5	160	4.6	111	4.0
Education (unspecified)	3	.1	2	.1	-	-	1	.1
Educational Administration	408	10.4	179	4.7	146	4.2	79	2.8
Educational Communications	4	.1	2	.1	4	.1	-	-
Educational Foundations	6	.2	4	.1	1	<.1	1	<.1
Educational Research	303	7.7	339	8.9	282	8.2	193	7.0
Educational Subject Areas	318	8.1	270	7.1	271	7.9	250	9.0
Elementary Education	127	3.2	133	3.5	99	2.9	52	1.9
Guidance and Counseling	160	4.1	122	3.2	112	3.3	79	2.9
Higher Education	81	2.1	104	2.7	136	3.9	86	3.1
History of Education	28	.7	48	1.3	36	1.1	21	.8
International Education	5	.1	17	.4	25	.7	20	.7
Mental Retardation	1	<.1	1	<.1	6	.2	1	<.1
Parent Education	-	-	-	-	-	-	2	.1
Philosophy of Education	90	2.3	58	1.5	38	1.1	38	1.4
Pre-school Education	7	.2	15	.4	20	.6	9	.3
Rural Education	3	.1	9	.2	7	.2	8	.3
Secondary Education	73	1.9	157	4.1	135	3.9	98	3.5
Special Education	103	2.6	68	1.8	75	2.2	52	1.9
Teacher Education	47	1.2	34	.9	30	.9	25	.9
Teaching Media	31	.8	15	.4	10	.3	15	.5
Urban Education	-	-	-	-	-	-	1	<.1
<u>Educational Subject Areas</u>								
Agricultural Education	9	.3	3	.1	5	.2	2	.1
Art Education	8	.2	3	.1	3	.1	4	.1
Business Education	5	.1	6	.2	9	.3	6	.2
Conservation Education	-	-	4	.1	-	-	5	.2
Consumer Education	-	-	1	<.1	-	-	-	-
Educational Subject Area (unspecified)	9	.2	18	.5	8	.2	10	.4
English/Literature & Drama	14	.4	29	.8	21	.6	18	.7
Foreign Languages & Literature	5	.1	7	.1	1	<.1	7	.3
Geography	1	<.1	1	<.1	7	.2	5	.2
History	1	<.1	8	.2	13	.4	10	.4
Home Economics	19	.5	10	.3	6	.2	2	.1
Hygiene Education	3	.1	5	.1	7	.2	2	.1
Industrial & Technical Education	13	.3	19	.5	13	.4	10	.4
Mathematics	37	1.0	23	.6	28	.8	25	.9
Medical Education	3	.1	2	.1	1	<.1	4	.1
Music Education	5	.1	7	.2	3	.1	5	.2
Performing Arts Education	-	-	-	-	-	-	1	<.1
Physical Education	17	.4	7	.2	8	.2	5	.2
Reading	79	2.0	39	1.0	51	1.5	42	1.5
Rehabilitation	7	.2	7	.2	4	.1	2	.1
Religious Education	3	.1	5	.1	6	.2	3	.1

TABLE III, Cont'd.
SUMMARY OF PROFESSIONAL IDENTIFICATION DATA
Total Analysis Group = 3923; Total Responses Vary per Item

2. Sub-fields of Professional Identification, cont'd:

	1st Choice		2nd Choice		3rd Choice		4th Choice	
	Total	%	Total	%	Total	%	Total	%
<u>Educational Subject Areas (Cont'd.)</u>								
Safety-driver Education	2	.1	-	-	-	-	-	-
Science Education	28	.7	14	.4	16	.5	24	.9
Social Studies	23	.6	20	.5	43	1.3	44	1.6
Speech Education - Hearing	12	.3	6	.2	-	-	3	.1
Teaching-media Education	1	<.1	-	-	2	.1	1	<.1
Vocational Education	11	.3	23	.6	15	.4	10	.4
<u>Psychology</u>								
Clinical Psychology	268	6.8	158	4.1	78	2.2	55	2.0
Comparative Psychology	3	.1	9	.2	10	.5	5	.2
Counseling and Guidance	231	5.9	237	6.2	167	4.8	88	3.2
Data Processing & Computation	3	.1	6	.2	3	.1	6	.2
Developmental Psychology	91	2.3	123	3.2	90	2.6	70	2.5
Educational Psychology	282	7.2	266	6.9	266	7.7	234	8.4
Evaluation, Measurement, Testing	25	.6	20	.5	19	.6	20	.7
Experimental Psychology	81	2.1	66	1.7	52	1.5	29	1.1
General Psychology	27	.7	39	1.0	46	1.3	50	1.8
Human Engineering	1	<.1	2	.1	-	-	2	.1
Human Relations	2	.1	2	.1	-	-	3	.1
Industrial & Personnel Psychology	88	2.2	67	1.8	58	1.7	47	1.7
Learning	9	.2	9	.2	4	.1	4	.2
Mathematics of Resource Use	-	-	2	.1	3	.1	2	.1
Military Psychology	2	.1	1	<.1	-	-	1	<.1
Personality Psychology	45	1.1	94	2.5	129	3.7	87	3.1
Physiological Psychology	7	.2	9	.2	19	.6	11	.4
Psycholinguistics	4	.1	1	<.1	2	.1	2	.1
Psychology (unspecified)	4	.1	2	.1	2	.1	1	<.1
Psychometrics	94	2.4	173	4.5	158	4.6	115	4.2
Psychotherapy, Group Therapy	-	-	2	.1	2	.1	1	<.1
Role Theory	-	-	-	-	1	<.1	1	<.1
School Psychology	147	3.8	110	2.9	114	3.3	90	3.2
Social Psychology	82	2.1	68	1.8	81	2.3	67	2.4
Statistics & Probability	34	.9	82	2.2	82	2.4	124	4.5
Theory & Practice of Computation	6	.2	10	.3	14	.4	11	.4
<u>Sociology</u>								
Applied Sociology	12	.3	8	.2	7	.2	11	.4
Community and Urban Sociology	8	.2	19	.5	11	.3	15	.5
Criminology and Deviance	10	.3	12	.3	12	.4	19	.7
Ecology & Demography	7	.2	9	.2	6	.2	3	.1
Educational Sociology	37	1.0	50	1.3	44	1.3	44	1.6
Family	8	.2	15	.4	16	.5	16	.6
General Sociology	13	.3	9	.2	19	.6	11	.4
Industrial Sociology	10	.3	6	.2	4	.1	7	.3
Medical Sociology	9	.2	13	.3	13	.4	8	.3
Research Methodology & Technology	23	.6	32	.8	32	.9	18	.7
Rural-Urban Sociology	11	.3	6	.2	6	.2	9	.3

TABLE III, Cont'd.
SUMMARY OF PROFESSIONAL IDENTIFICATION DATA
Total Analysis Group = 3923; Total Responses Vary per Item

2. Sub-fields of Professional Identification, cont'd.:

	1st Choice		2nd Choice		3rd Choice		4th Choice	
	Total	%	Total	%	Total	%	Total	%
<u>Sociology (Cont'd.)</u>								
Social Change & Development	6	.2	18	.5	25	.7	15	.5
Social Conflict	2	.1	8	.2	9	.3	3	.1
Social Organization	20	.5	27	.7	19	.6	24	.9
Sociological Theory	7	.2	8	.2	2	.1	11	.4
Sociology (unspecified)	10	.3	7	.2	3	.1	9	.3
Sociology of Religion	3	.1	3	.1	3	.1	3	.1
<u>Other Social Sciences</u>								
Accounting	1	<.1	2	.1	-	-	-	-
Anthropology	10	.3	5	.1	10	.3	10	.4
Business Administration	1	<.1	1	<.1	-	-	-	-
Business Law	1	<.1	-	-	-	-	-	-
Business Organization	3	.1	2	.1	5	.1	4	.1
Economics	10	.3	7	.2	14	.4	8	.3
Geography	-	-	2	.1	-	-	2	.1
History	4	.1	9	.2	5	.1	12	.4
Management	1	<.1	1	<.1	-	-	2	.1
Marketing	-	-	-	-	-	-	1	<.1
Military Science	-	-	-	-	-	-	-	-
Other Social Sciences (unspecified)	-	-	-	-	-	-	-	-
Political Science	12	.3	11	.3	14	.4	12	.4
Public Administration	-	-	2	.1	2	.1	-	-
Speech	11	.3	12	.3	8	.2	8	.3
<u>Humanities</u>								
Art	-	-	3	.1	4	.1	5	.2
Humanities (unspecified)	3	.1	2	.1	1	<.1	2	.1
Journalism	3	.1	1	<.1	1	<.1	1	<.1
Language, Literature, & Language Arts	13	.3	18	.5	11	.3	23	.8
Law	-	-	-	-	1	<.1	1	<.1
Liberal Arts	-	-	-	-	-	-	-	-
Library Science	6	.2	-	-	-	-	-	-
Music	2	.1	4	.1	4	.1	5	.2
Philosophy	13	.3	24	.6	12	.4	19	.7
Religion	2	.1	6	.2	11	.3	9	.3
<u>Physical Sciences</u>								
Astronomy	-	-	-	-	2	.1	-	-
Chemistry	-	-	3	.1	9	.3	6	.2
Engineering	2	.1	2	.1	1	<.1	5	.2
Geology	-	-	1	<.1	-	-	-	-
History & Philosophy of Science	-	-	-	-	-	-	-	-
Industrial Arts	-	-	-	-	-	-	-	-
Industrial Research	-	-	-	-	-	-	-	-
Mathematics	6	.2	7	.2	7	.2	17	.6
Meteorology	-	-	-	-	2	.1	-	-
Operation Research	1	<.1	3	.1	2	.1	-	-
Physical Sciences (unspecified)	-	-	-	-	-	-	-	-
Physics	-	-	2	.1	4	.1	8	.3

TABLE III, Cont'd.
SUMMARY OF PROFESSIONAL IDENTIFICATION DATA
 Total Analysis Group = 3923; Total Responses Vary per Item

2. Sub-fields of Professional Identification, cont'd.:

	<u>1st Choice</u>		<u>2nd Choice</u>		<u>3rd Choice</u>		<u>4th Choice</u>	
	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>
<u>Biological Sciences</u>								
Agronomy	-	-	-	-	-	-	2	.1
Anatomy	-	-	1	<.1	-	-	3	.1
Animal Husbandry	-	-	-	-	2	.1	1	<.1
Biological Sciences (unspecified)	-	-	-	-	1	<.1	-	-
Botany	1	<.1	2	.1	1	<.1	2	.1
Ecology	-	-	1	<.1	-	-	1	<.1
Entomology	-	-	-	-	-	-	-	-
Genetics	1	<.1	1	<.1	1	<.1	-	-
Horticulture	-	-	-	-	-	-	2	.1
Medicine & Surgery	13	.3	4	.1	2	.1	1	<.1
Microbiology	1	<.1	1	<.1	1	<.1	-	-
Nursing	6	.2	-	-	-	-	-	-
Nutrition & Metabolism	3	.1	2	.1	1	<.1	-	-
Pathology	2	.1	1	<.1	1	<.1	3	.1
Pharmacology	-	-	1	<.1	-	-	-	-
Physiology	4	.1	3	.1	-	-	3	.1
Psychiatric Administration	-	-	-	-	-	-	-	-
Psychiatry	7	.2	9	.2	1	<.1	3	.1
Science Manpower	-	-	-	-	-	-	-	-
Zoology	1	<.1	2	.1	4	.1	7	.3
<u>Other Major Field</u>								
Other Major Field (unspecified)	1	<.1	-	-	1	<.1	5	.2
Science	-	-	-	-	-	-	-	-

TABLE IV
SUMMARY OF PRESENT EMPLOYMENT DATA
 Total Analysis Group = 3923; Total Responses Vary per Item

1. Major Fields of Employment:

	<u>Education</u>	<u>Psychology</u>	<u>Sociology</u>	<u>Other Social Sciences</u>	<u>Humanities</u>	<u>Physical Sciences</u>	<u>Biological Sciences</u>	<u>Total Responses</u>
<u>1st Choice</u> <u>Total</u> %	2148 55.7	1372 35.6	192 5.0	49 1.3	37 .9	17 .4	42 1.1	3857 100
<u>2nd Choice</u> <u>Total</u> %	1516 51.7	1113 37.9	191 6.5	41 1.4	37 1.3	12 .4	24 .8	2934 100
<u>Grand</u> <u>Total</u> %	3664 54.0	2485 36.6	383 5.6	90 1.3	74 1.1	29 .4	66 1.0	6791 100

TABLE IV, Cont'd.
SUMMARY OF PRESENT EMPLOYMENT DATA
Total Analysis Group = 3923; Total Responses Vary per Item

2. Sub-fields of Present Positions in Education and Psychology:

	1st Choice		2nd Choice	
	Total	%	Total	%
<u>Education</u>				
Adult Education	31	.8	24	.8
Comparative Education	10	.3	16	.5
Curriculum and Methods	153	4.0	144	4.9
Education (unspecified)	-	-	3	.1
Educational Administration	459	11.9	219	7.5
Educational Communications	6	.2	2	.1
Educational Foundations	8	.2	11	.4
Educational Research	363	9.4	333	11.3
Educational Subject Areas	323	8.4	179	6.1
Elementary Education	100	2.6	72	2.5
Guidance and Counseling	132	3.4	77	2.6
Higher Education	167	4.3	120	4.1
History of Education	24	.6	29	1.0
International Education	3	.1	12	.4
Mental Retardation	4	.1	3	.1
Parent Education	-	-	-	-
Philosophy of Education	78	2.0	43	1.5
Pre-school Education	7	.2	10	.3
Rural Education	3	.1	6	.2
Secondary Education	67	1.7	84	2.9
Special Education	109	2.8	60	2.0
Teacher Education	62	1.6	52	1.8
Teaching Media	39	1.0	17	.6
Urban Education	-	-	-	-
<u>Educational Subject Areas</u>				
Agricultural Education	9	.2	3	.1
Art Education	8	.2	-	-
Business Education	6	.2	4	.1
Conservation Education	2	.1	-	-
Consumer Education	-	-	-	-
Educational Subject Area (unspecified)	13	.3	13	.4
English/Literature & Drama	12	.3	4	.1
Foreign Languages & Literature	6	.2	2	.1
Geography	-	-	3	.1
History	4	.1	3	.1
Home Economics	19	.5	11	.4
Hygiene Education	4	.1	4	.1
Industrial & Technical Education	19	.5	11	.4
Mathematics	27	.7	20	.7
Medical Education	3	.1	3	.1
Music Education	4	.1	3	.1
Performing Arts Education	-	-	1	<.1
Physical Education	17	.4	2	.1
Reading	65	1.7	31	1.1
Rehabilitation	15	.4	6	.2

TABLE IV, Cont'd.
SUMMARY OF PRESENT EMPLOYMENT DATA
Total Analysis Group = 3923; Total Responses Vary per Item

2. Sub-fields of Present Positions in Education and Psychology, cont'd.:

	1st Choice		2nd Choice	
	Total	%	Total	%
<u>Educational Subject Areas (Cont'd.)</u>				
Religious Education	5	.1	5	.2
Safety-driver Education	3	.1	-	-
Science Education	25	.7	10	.4
Social Studies	18	.6	19	.6
Speech Education - Hearing	14	.4	2	.1
Teaching-media Education	3	.1	2	.1
Vocational Education	11	.3	15	.5
<u>Psychology</u>				
Clinical Psychology	205	5.3	123	4.2
Comparative Psychology	1	<.1	6	.2
Counseling and Guidance	180	4.7	146	5.0
Data Processing & Computation	11	.3	6	.2
Developmental Psychology	80	2.1	90	3.1
Educational Psychology	233	6.0	187	6.4
Evaluation, Measurement, Testing	26	.7	25	.8
Experimental Psychology	59	1.5	46	1.6
General Psychology	54	1.4	41	1.4
Human Engineering	3	.1	4	.1
Human Relations	-	-	3	.1
Industrial & Personnel Psychology	91	2.4	47	1.6
Learning	9	.2	10	.4
Mathematics of Resource Use	-	-	-	-
Military Psychology	2	.1	2	.1
Personality Psychology	39	1.0	65	2.2
Physiological Psychology	5	.1	-	-
Psycholinguistics	3	.1	-	-
Psychology (unspecified)	12	.3	4	.1
Psychometrics	75	2.0	6	.2
Psychotherapy, Group Therapy	2	.1	4	.1
Role Theory	1	<.1	-	-
School Psychology	159	4.1	58	2.0
Social Psychology	67	1.7	27	.9
Statistics & Probability	32	.8	63	2.1
Theory & Practice of Computation	8	.2	10	.4
<u>Sociology</u>				
Applied Sociology	13	.3	6	.2
Community and Urban Sociology	6	.2	9	.3
Criminology and Deviance	13	.3	15	.5
Ecology & Demography	6	.2	7	.2
Educational Sociology	31	.8	37	1.3
Family	10	.3	10	.4
General Sociology	29	.8	5	.2
Industrial Sociology	6	.2	3	.1
Medical Sociology	11	.3	11	.4
Research Methodology & Technology	23	.6	28	1.0

TABLE IV, Cont'd.
SUMMARY OF PRESENT EMPLOYMENT DATA
Total Analysis Group = 3923; Total Responses Vary per Item

2. Sub-fields of Present Positions in Education and Psychology, cont'd.:

	1st Choice		2nd Choice	
	Total	%	Total	%
<u>Sociology (Cont'd.)</u>				
Rural-Urban Sociology	9	.2	7	.2
Social Change & Development	8	.2	16	.5
Social Conflict	3	.1	2	.1
Social Organization	14	.4	22	.8
Sociological Theory	3	.1	3	.1
Sociology (unspecified)	6	.2	7	.2
Sociology of Religion	1	<.1	2	.1
<u>Other Social Sciences</u>				
Accounting	1	<.1	-	-
Anthropology	7	.2	9	.3
Business Administration	1	<.1	-	-
Business Law	-	-	-	-
Business Organization	3	.1	5	.2
Economics	8	.2	3	.1
Geography	-	-	-	-
History	-	-	5	.2
Management	2	.1	-	-
Marketing	-	-	-	-
Military Science	-	-	-	-
Other Social Sciences (unspecified)	-	-	1	<.1
Political Science	12	.3	4	.1
Public Administration	-	-	1	<.1
Speech	14	.4	7	.2
<u>Humanities</u>				
Art	-	-	2	.1
Humanities (unspecified)	1	<.1	1	<.1
Journalism	3	.1	-	-
Language, Literature, & Language Arts	10	.3	16	.6
Law	1	<.1	-	-
Liberal Arts	-	-	-	-
Library Science	-	-	-	-
Music	1	<.1	3	.1
Philosophy	11	.3	10	.3
Religion	3	.1	4	.1
<u>Physical Sciences</u>				
Astronomy	-	-	-	-
Chemistry	-	-	1	<.1
Engineering	2	.1	1	<.1
Geology	-	-	-	-
History & Philosophy of Science	-	-	-	-
Industrial Arts	-	-	-	-
Industrial Research	1	<.1	-	-
Mathematics	10	.3	6	.2
Meteorology	-	-	-	-
Operation Research	2	.1	3	.1
Physical Sciences (unspecified)	-	-	-	-
Physics	2	.1	1	<.1

TABLE IV, Cont'd.
SUMMARY OF PRESENT EMPLOYMENT DATA
Total Analysis Group = 3923; Total Responses Vary per Item

2. Sub-fields of Present Positions in Education and Psychology, cont'd.:

	1st Choice		2nd Choice	
	Total	%	Total	%
<u>Biological Sciences</u>				
Agronomy	-	-	-	-
Anatomy	-	-	-	-
Animal Husbandry	-	-	-	-
Biological Sciences (unspecified)	-	-	-	-
Botany	-	-	1	<.1
Ecology	-	-	-	-
Entomology	-	-	-	-
Genetics	-	-	-	-
Horticulture	1	<.1	-	-
Medicine & Surgery	14	.4	3	.1
Microbiology	1	<.1	-	-
Nursing	4	.1	1	<.1
Nutrition & Metabolism	3	.1	-	-
Pathology	2	.1	3	.1
Pharmacology	-	-	1	<.1
Physiology	2	.1	1	<.1
Psychiatric Administration	-	-	-	-
Psychiatry	11	.3	7	.2
Science Manpower	-	-	-	-
Zoology	1	<.1	1	<.1
<u>Other Major Field</u>				
Other Major Field (unspecified)	2	.1	3	.1
Science	-	-	-	-

TABLE IV, Cont'd.
SUMMARY OF PRESENT EMPLOYMENT DATA
Total Analysis Group = 3923; Total Responses Vary per Item

3. Summary of Data Pertaining to Positions:

	Principal Position				Second Position	
	1st Assignment		2nd Assignment		Total	%
	Total	%	Total	%		
Status	<u>3906</u>	<u>100</u>	<u>333</u>	<u>100</u>	<u>1336</u>	<u>100</u>
Retired	23	.6	1	.3	5	.4
Self-employed	39	1.0	1	.3	82	6.1
Executive	1296	33.2	164	49.3	363	27.2
Asst. Executive	249	6.4	15	4.5	47	3.5
Major Staff	2248	58.5	152	45.6	828	62.0
Minor Staff	51	1.3	-	-	11	.8
Institutional Type	<u>3851</u>	<u>100</u>	<u>331</u>	<u>100</u>	<u>1201</u>	<u>100</u>
Clinics	31	.8	2	.6	29	2.4
Colleges and Universities	2476	64.3	302	91.4	893	74.4
Foundations	122	3.2	5	1.5	68	5.7
Governmental Agencies	355	9.2	4	1.2	84	7.0
Hospitals	47	1.2	2	.6	31	2.6
Industry	29	.7	1	.3	9	.7
Professional Societies	58	1.5	2	.2	16	1.3
School Systems	619	16.1	11	3.6	31	2.6
Business	114	3.0	2	.6	40	3.3
Unit Type	<u>3858</u>	<u>100</u>	<u>331</u>	<u>100</u>	<u>1257</u>	<u>100</u>
Administration	1513	39.2	179	54.1	385	30.6
Research	301	7.8	15	4.5	120	9.6
Service	368	9.5	19	5.8	192	15.3
Teaching	1676	43.5	118	35.6	560	44.5
Field Type	<u>3878</u>	<u>100</u>	<u>332</u>	<u>100</u>	<u>1322</u>	<u>100</u>
Education	2928	75.5	235	70.8	864	65.3
Psychology	761	19.6	64	19.3	388	29.4
Sociology	97	2.6	19	5.7	27	2.0
Other Social Sciences	31	.8	5	1.5	9	.7
Humanities	28	.7	4	1.2	16	1.2
Physical Sciences	13	.3	1	.3	10	.8
Biological Sciences	20	.5	4	1.2	8	.6
Location	<u>3910</u>	<u>100</u>			<u>1320</u>	<u>100</u>
New England	235	6.0			95	7.2
Middle Atlantic	903	23.1			333	25.2
E. North Central	914	23.4			281	21.3
W. North Central	285	7.3			94	7.1
South Atlantic	558	14.3			154	11.7
E. South Central	94	2.4			36	2.7
W. South Central	177	4.5			71	5.4
Mountain	187	4.8			50	3.8
Pacific	534	13.6			193	14.6
Foreign Countries	23	.6			13	1.0

TABLE IV, CONT'D.
SUMMARY OF PRESENT EMPLOYMENT DATA
Total Analysis Group = 3923; Total Responses Vary per Item

4. Total Number of Hours per Week Devoted to Professional Activities:													
	0	1-10	11-20	21-30	31-39	40	41-50	51-60	61-70	71-80	81-	Total Responses 3848 100	
Total	2	22	103	106	166	1306	1222	713	140	50	12		
%	.1	.8	2.8	2.7	4.3	33.9	31.7	18.5	3.6	1.3	.3		
Mean Numbers of Hours = 46.4													
5. Percent of Hours per Week Devoted to Categories of Professional Activities:													
Administration:													
Total	1048	609	454	387	212	360	126	105	249	131	60	70	3811
%	27.5	16.0	11.9	10.2	5.6	9.4	3.3	2.8	6.5	3.4	1.6	1.8	100
Research:													
Total	361	956	610	591	330	403	106	91	148	85	10	118	3809
%	9.5	25.1	16.0	15.4	8.7	10.6	2.8	2.4	3.9	2.2	.3	3.1	100
Teaching:													
Total	1194	493	355	456	297	415	160	141	189	57	20	31	3808
%	31.3	13.0	9.3	12.0	7.8	10.9	4.2	3.7	5.0	1.5	.5	.8	100
Other:													
Total	2092	352	304	283	190	198	85	68	94	73	21	43	3803
%	55.0	9.3	8.0	7.4	5.0	5.2	2.2	1.8	2.5	1.9	.6	1.1	100
6. Median Percents of Time Devoted to Categories of Professional Activities:													
1. Individuals reporting 1-10% time													
2. Individuals reporting more than 10% time													
3. Individuals reporting 20% or more time													
Administration:	30 (2763)*	50 (2154)	50 (1993)										
Research:	25 (3448)	33 (2492)	40 (2288)										
Teaching:	33 (2614)	40 (2121)	45 (1988)										
Other:	30 (1711)	40 (1359)	40 (1252)										

* The totals upon which the median percents are based are given in parentheses.

TABLE IV, Cont'd.
SUMMARY OF PRESENT EMPLOYMENT DATA
Total Analysis Group = 3923; Total Responses Vary per Item

7. Activities Listed Under "Other":		Total Choices: 2061 = 100%	
Activity	Total	%	Total
Counseling, therapy	487	23.6	49
Consulting	320	15.5	47
Miscellaneous duties	228	11.1	46
Writing	206	10.0	46
Professional society duties	180	8.7	39
Advising grad. & undergrad. students	92	4.5	36
Supervision	87	4.2	31
Reading, studying, attending conventions	80	3.9	16
Curriculum & course development	59	2.9	12
Advising grad. students			2.4
Committee work, study groups			2.3
Special assignments			2.2
Field service			2.2
Student teacher supervision			1.9
Research planning & development			1.7
Advising undergrad. students			1.5
Institutional research			.8
Record keeping & data processing			.6

TABLE V
SUMMARY OF RESEARCH AREAS DATA
 Total Analysis Group = 3923; Total Responses Vary per Item

Totals and Percents for All Research Areas and Major Divisions of Research Areas

		Present Active Areas	Past Active Areas	Grand Total
<u>Administration and Organization</u>	Total	1522	803	2325
	%	14.2	14.8	14.4
Accreditations		42	23	65
Admissions; enrollment		126	59	185
Administrative goals and policies		93	45	138
Board of Education		6	2	8
Education associations and professional societies		8	1	9
Educational politics		1	-	1
Federal government		2	-	2
Integration and racial conflict		61	22	83
Inter-agency relationships		51	29	80
Leadership development		138	88	226
Materials and supplies; educational media		34	16	50
Organizational patterns of educational institutions		223	100	323
Personnel employment practices		85	56	141
Pupil personnel		13	7	20
Scholarships		-	1	1
School boards		1	3	4
School calendar and scheduling		54	27	81
School finance and statistics		166	76	242
School law and legislation		24	7	31
School plant - school facilities		88	52	140
School records		2	1	3
School-community relationships; religion		112	66	178
Staff relations		74	65	139
State Departments of Education		2	-	2
Student services: health, financial aid, etc.		51	26	77
Summer school		-	1	1
Transportation		19	10	29
<u>Curriculum</u>	Total	1702	825	2527
	%	15.9	15.2	15.7
Administrator education		57	36	93
Adult and continuing educational curricula		70	34	104
Articulation		7	1	8
Curricular goals and standards		153	77	230
Curriculum methodology		133	58	191
Elementary curricula		204	97	301
Graduate and professional curricula		115	51	166
Junior college curricula		28	16	44
Liberal arts curricula		65	35	100
Other educational specialist (unspecified)		7	4	11
Other higher educational curricula (unspecified)		9	1	10

TABLE V, Cont'd.
SUMMARY OF RESEARCH AREAS DATA
Total Analysis Group = 3923; Total Responses Vary per Item

Totals and Percents for All Research Areas and Major Divisions of Research Areas

		Present Active Areas	Past Active Areas	Grand Total
<u>Curriculum (Cont'd.)</u>				
Outside school educational programs		2	1	3
Pre-school curricula		41	24	65
School-counselor/psychologist education		88	37	125
Secondary curricula		217	117	334
Student activities; extracurriculum		8	5	13
Teacher education		345	167	512
Urban Education		1	-	1
Vocational-technical school curricula		78	29	107
<u>Educational Research As An Activity</u>	Total	921	257	1178
	%	<u>8.7</u>	<u>4.7</u>	<u>7.3</u>
Administration and organization of research projects		12	4	16
Application of research results and theory in educational settings		13	5	18
Development of educational research		244	58	302
Dissemination of knowledge and techniques; educational communications		213	53	266
Goals, functions, and dimensions of inquiry in education		68	27	95
Organizing and summarizing research results		5	-	5
Research methodology		2	-	2
Techniques of experimental and statistical design and analysis		139	46	185
Techniques of theory building and educational theory		50	22	72
Training and nurturing of educational researchers		159	34	193
<u>Goals and Functions of Education</u>	Total	38	11	49
	%	<u>.4</u>	<u>.2</u>	<u>.3</u>
Consumer education		-	4	4
Curriculum		2	-	2
Guidance and counseling		2	-	2
Teaching-learning process		1	-	1
<u>Guidance and Counseling/School Psychology</u>	Total	1180	747	1927
	%	<u>11.0</u>	<u>13.7</u>	<u>12.0</u>
Absenteeism-attendance		10	2	12
Academic achievement and records - underachievement		232	98	330
Academic advising		1	-	1
Classroom problems		3	-	3
Curricular choices		-	1	1

TABLE V, Cont'd.
SUMMARY OF RESEARCH AREAS DATA

Total Analysis Group = 3923; Total Responses Vary per Item

Total and Percents for All Research Areas and Major Divisions of Research Areas

		Present Active Areas	Past Active Areas	Grand Total
<u>Guidance and Counseling/School Psychology (Cont'd.)</u>				
Delinquency: character rehabilitation		49	48	97
Development of guidance and counseling services		108	108	216
Drop-outs - attrition		221	108	329
Emotional disturbances		106	88	194
Follow up studies of graduates		15	10	25
Goals and functions of guidance and counseling		86	76	162
Job opportunities and occupational analyses		40	29	69
Married students and intersex relations		6	1	7
Personnel training and working conditions		32	15	47
Rehabilitation		4	4	8
School adjustment and growth		22	3	25
School social work		1	-	1
Therapeutic practices, processes and outcomes		92	56	148
Transfer students		4	1	5
Unemployment problems		-	1	1
Vocational counseling and placement		109	82	191
<u>Historical Development of Education</u>	Total	66	35	101
	%	.6	.6	.6
Administration and organization		16	5	21
Comparative administration		2	-	2
Curriculum		4	6	10
Educational research		-	-	-
Goals and functions		-	-	-
Guidance		3	-	3
Historical development; history of education		39	23	62
Personnel		1	1	2
Teaching-learning		1	-	1
Testing and measurement		-	-	-
<u>Personnel</u>	Total	541	221	762
	%	5.1	4.1	4.7
Academic freedom		13	6	19
Biographical studies of educational personnel		12	6	18
Characteristic roles and behaviors of educational personnel; successful role performance		116	68	184
Employment practices and working conditions		75	64	139
Interrelations among educational personnel		37	17	54
Professional training and qualifications		101	53	154
Supervision		180	5	185

TABLE V, Cont'd.
SUMMARY OF RESEARCH AREAS DATA
Total Analysis Group=3923; Total Responses Vary Per Item

Totals and Percents for All Research Areas and Major Divisions of Research Areas

		Present Active Areas	Past Active Areas	Grand Total
<u>The Teaching-Learning Process</u>	Total	3039	1622	4661
	%	28.4	29.9	28.9
Academic student groups		8	3	11
Achievement - underachievement and overachievement		98	55	153
Adolescence		14	8	22
Adults and the aging		3	2	5
Aspiration		3	1	4
Attitudes, values, interests		130	88	218
Blind and partially seeing		13	13	26
Child development		14	5	19
Classroom conditions and grouping; school climate		100	45	145
Cognitive behavior and development		147	66	213
Communicative behavior; language		68	39	107
Creative behavior - creativity		70	33	103
Crippled		12	14	26
Culturally deprived and different		32	11	43
Deaf and hard of hearing		25	27	52
Economic factors		12	3	15
Educational factors		4	-	4
Educational films		57	41	98
Educational linguistics		2	-	2
Emotional behavior and development		50	32	82
Emotionally disturbed or socially maladjusted		91	70	161
Gifted; talented or superior students		128	73	201
Home environmental factors		68	34	102
Human factors		-	-	-
Interpersonal relationships; group dynamics		90	55	145
Learning behavior - learning and retention		239	138	377
Mentally retarded and slow learners		130	61	191
Moral behavior		2	-	2
Motivation and emotion		118	76	194
Normal children		1	1	2
Perceptual behavior and development		92	63	155
Physical behavior and development		41	18	59
Radio		12	9	21
Readiness		45	19	64
Reading		170	66	236
Social behavior		56	47	103
Social factors		79	52	131
Special education; special student groups		44	15	59
Special health problems: physical and mental health		32	14	46
Speech impaired		21	5	26
Subject matter methods and media		110	43	153

TABLE V, Cont'd.
SUMMARY OF RESEARCH AREAS DATA
Total Analysis Group=3923; Total Responses Vary Per Item

Totals and Percents for All Research Areas and Major Divisions of Research Areas

		Present Active Areas	Past Active Areas	Grand Total
<u>The Teaching-Learning Process (Cont'd)</u>				
Subject matter organization		35	17	52
Tapes and other auditory media		38	21	59
Teacher techniques; general teaching techniques		125	61	186
Teaching machines and programmed learning		200	81	281
Teaching methods and media		68	24	92
Television		80	55	135
Textbooks; educational books and papers		50	13	63
<u>Testing and Measurement and Evaluation</u>	Total	1443	834	2277
	%	13.5	15.4	14.2
Achievement - underachievement		135	77	212
Admissions		57	40	97
Anthropological (including cross-cultural) studies of education		15	3	18
Aptitudes		111	66	177
Community development		1	-	1
Comparative education		28	9	37
Computers and other data processing in education		30	5	35
Creativity		57	25	82
Educational psychology		14	6	20
Educational sociology		27	10	37
Elementary education		13	6	19
Emotional problems		42	25	67
Goals and functions of testing and evaluation		80	56	136
Higher education		28	12	40
Intelligence		113	74	187
Interests or ambitions, attitudes, values		55	37	92
International education		29	12	41
Motivation		63	38	101
Norms and prediction studies		34	5	39
Other (unspecified)		18	9	27
Personality		144	92	236
Philosophy of education		65	11	76
Placement		26	10	36
Readiness		32	22	54
Reading		76	28	104
School adjustment		29	17	46
School program or system evaluation		29	11	40
Secondary education		11	6	17
Sociometric tests		9	3	12
Subject matter tests		56	37	93
Testing methodology: construction, analysis interpretation		129	82	211
Vocational choice and career development		52	43	95

CHAPTER IV

SUGGESTIONS AND ILLUSTRATIONS OF WAYS IN WHICH REGISTER DATA MAY BE USED

In the developmental stage of the National Register Project, several professional uses (see Chapter I, page 6) were projected for the Register and the data derived through it. The purpose of this chapter is to discuss and illustrate these projected uses along with others which have later emerged.

Three major categories of utilization will be discussed: (1) Communication, (2) Administration, and (3) Research. Under Communication, the discussion will concern provisions for correspondence among researchers, and the distribution of research publications and other information. Under Administration, data recently provided to the U. S. Office of Education, relative to Title IV of the new education act (Public Law 89-10), will be offered as an illustration. Under Research, the discussion will concern the selection of study samples and the utilization of Register data in defining important questions and issues related to educational research and researchers. How such questions and issues may be defined with the aid of the Register will be illustrated through an extensive discussion of data regarding highest level degrees and percent of time devoted to research.

COMMUNICATION

Correspondence Among Researchers

Publication is one of the primary ways by which researchers gain substantial contact with the procedures and results of the work of their colleagues. The publishing process, however, mandates that substantial amounts of time elapse between the production of new data, and their eventual publication in professional journals or other sources. If a researcher were to identify and directly contact other researchers working in his area, however, he would be in a position to obtain information which would be considerably more current than that which is available through published sources. This kind of individual contact does occur to some extent, of course, among researchers who are aware of each other's work. If a means existed by which a researcher could systematically identify a substantial proportion of all persons working in his area, then he could have access to a wider range of current research than would be possible through more informal associations.

The Register will make it possible for individual researchers to identify and make contacts with their colleagues in such a systematic and comprehensive manner as that suggested above. It is the intent of the National Register Project and of Phi Delta Kappa to provide, at cost, a service through which such contacts may be made. Individuals may be identified through appropriate card sorting on designated information categories, and names and addresses may be provided on mailing labels and/or print-out sheets.

Distribution of Research Publications and Other Information

The Register can be used by the U. S. Office of Education, or by other professional institutions or groups, as a means of communicating with researchers in the field. A request for names and addresses recently received from OE Project # Y - 011, "Strategies for Educational Change," may be cited as an illustration. This project plans the mailing of a newsletter to all individuals whose research activities, or other professional work, indicates that they would have an interest in the area of educational innovations. The following information categories were chosen as those through which appropriate individuals could be identified:

1. Research Areas:

Administration and Organization

- Administrative goals and policies
- Leadership development
- Materials and supplies; educational media
- Organizational patterns of educational institutions
- Educational associations and professional societies
- Federal government
- Educational politics

Curriculum

- Curricular goals and standards
- Curriculum methodology

Educational Research as an Activity

- Dissemination of knowledge and techniques; educational communication
- Application of research results and theory to educational settings
- Organizing and summarizing research results

Guidance and Counseling/School Psychology

- Development of guidance and counseling services

Historical Development of Education

- Goals and functions

Personnel

Characteristic roles and behaviors of educational personnel; successful role performance

The Teaching-Learning Process

Subject matter organization

Testing and Measurement/Evaluation

Computers and other data processing in education

Other Areas

Anthropological (including cross-cultural) studies of education

2. Types of Institutional Units of Employment:

Research Units

Service Units

Multiple sets of mailing labels will be supplied to the project at cost for the various mailings of the newsletter. A print-out of the names and addresses has been supplied for purposes of refining and maintaining the mailing list.

ADMINISTRATION

Register data will be useful in administrative planning and policy making. A request recently received from the U. S. Office of Education may be offered as an illustration. This request called for information which would be of use in planning for research trainee grants under Title IV of the new education act (Public Law 89-10). The data provided to the U. S. Office are presented in the following discussion.

Estimates of the Number of Potential Educational Researchers
Graduating in the Academic Year, 1965-1966

Table VI, page 98, contains frequencies for the number of highest level degrees per year received by individuals in the analysis group. The ten most productive years run from 1952 through 1961. The frequencies decline after 1961, probably because many individuals receiving degrees during the past few years (1962-1964) have not yet become visible as educational researchers. The 1952-1961 decade therefore appears to be the most reliable source of information at this time for producing estimates of potential educational researchers to be graduated in 1966. Total percentages per degree level for the entire analysis group are: doctoral, 82.3%; professional, 0.8%; master's, 16.0%; and bachelor's, 0.9% (see Table II, Item 1, page 66).

Two thousand and sixty-five (2,065) individuals in the analysis group received their highest level degree during the decade, 1952 through 1961. This is an average of 206.5 per year. The analysis group contains 3,923 persons, while the Register at the present time contains approximately 6,000. It seems reasonable to assume that another 2000 educational researchers may exist and may be identified in the preparation of further issues of the Register. The present analysis group thus may be considered to contain approximately 50% of the educational researcher population in the United States. On this basis, it may be estimated that a core of at least 413 potential educational researchers will be graduated in 1966. With the continual growth which has occurred in recent years, both in enrollments and in support for educational research, the number of potential educational researchers who will actually graduate in 1966 may well be higher.

According to data concerning degree majors from the entire analysis group (see Table II, Item 3, page 67), 45.8% of the degrees granted to potential educational researchers in 1966 will be in education, 43.5% in psychology, 5% in sociology, with the remainder in a scattering of other fields. Data in Table VII, page 98, for distributions of highest level degrees for five year periods since 1951, however, suggest the possibility of a tendency away from the above figures toward a greater concentration of degree majors in education for the most recent period, 1961-1964. Whether this trend is real, or reflects possible biases in the data for the period, 1961-1964, is uncertain. In arriving at estimates of future field distributions, however, some thought should be given to the possibility that such a trend might indeed exist.

Schools Identified as Highest Producers of Educational Researchers

Table VIII, page 99, contains frequencies for the 30 institutions most often cited as granting the highest level degree to individuals in the analysis group for the ten-year period, 1952 through 1961. Comparable data for highest level degrees received in all years for which data are recorded (1901-1964) are presented in Table IX, page 100. It may be noted that all but one of the same schools are involved, the only differences being changes in ranking and in frequencies.

Analysis of Data Concerning Individual Schools

Table X, page 101, contains a distribution of highest level degree majors for one school, The Ohio State University, during the period 1952 through 1961. It is interesting to note that 38.0% of the majors are in education, 50.8% in psychology, 7.0% in sociology, with 4.2% in other

fields. These percentages, while based on small frequencies, are nonetheless different from corresponding distributions for the total analysis group. This suggests that important differences relative to the training of educational researchers may exist between schools in terms of academic emphasis and departmental-administrative responsibility. Additional differences might also be found relative to other categories of Register data. Table X is thus a sample of the type of information that could result from analyses of data concerning individual schools.

Data such as those presented above can be obtained not only on a national scale, but also on a regional, state or local scale, as well as in terms of the numerous types of professional subgroups definable through the information categories listed in the data card formats described in Chapter II.

TABLE VI
DISTRIBUTION OF HIGHEST LEVEL DEGREES RECEIVED PER YEAR
(N = 3900)

Year	Frequency	Year	Frequency	Year	Frequency
1901	1	1929	19	1947	71
1911	1	1930	28	1948	112
1912	1	1931	36	1949	142
1914	1	1932	27	1950	172
1915	1	1933	27	1951	183
1916	4	1934	33	1952	222
1917	4	1935	28	1953	197
1918	1	1936	31	1954	184
1919	2	1937	40	1955	194
1920	3	1938	39	1956	188
1921	2	1939	35	1957	203
1922	4	1940	56	1958	241
1923	3	1941	56	1959	224
1924	4	1942	61	1960	207
1925	6	1943	54	1961	205
1926	12	1944	38	1962	187
1927	20	1945	25	1963	124
1928	11	1946	50	1964	80

TABLE VII
DISTRIBUTIONS OF HIGHEST LEVEL DEGREE MAJORS FOR FIVE YEAR
PERIODS BEGINNING WITH 1951:
Total Analysis Group = 3923, Total Responses Vary per Item

Year of Degree	Education		Psychology ^a		Sociology	
	Total	%	Total	%	Total	%
1951 - 1955	412	42.7	455	47.1	56	5.8
1956 - 1960	488	46.4	474	45.0	60	5.7
1961 - 1964	338	56.5	206	34.5	30	5.0
All years	1770	45.8	1680	43.5	192	5.0

^aIncludes Educational Psychology.

TABLE VIII

THIRTY INSTITUTIONS MOST OFTEN CITED AS GRANTING THE HIGHEST LEVEL DEGREE
DURING THE DECADE, 1952 THROUGH 1961

Institution	Frequency	Institution	Frequency
Columbia University *	172	University of Southern California	38
University of Minnesota	85	Pennsylvania State University	37
New York University	80	Northwestern University	33
University of Michigan	78	Syracuse University	33
Ohio State University	72	Cornell University	32
University of Chicago	70	Purdue University	25
University of Illinois	66	University of California at Los Angeles	24
University of Wisconsin	56	Wayne State University	24
Harvard University	53	University of Pennsylvania	24
University of Texas	49	University of Nebraska	23
Indiana University	47	Temple University	23
University of Iowa	45	George Peabody College for Teachers	21
Boston University	40	Yale University	20
Michigan State University	40	Western Reserve University	20
Stanford University	39	University of Pittsburgh	20
University of California at Berkeley	38		

*includes Teachers College. Seventy (70) respondents listed "Columbia University" on the questionnaire, and 102 listed "Teachers College" or "Teachers College, Columbia University."

†Constitutes the 31st university on the list, but with the same frequency as numbers 29 and 30.

TABLE IX
THIRTY INSTITUTIONS MOST OFTEN CITED AS GRANTING THE HIGHEST
LEVEL DEGREE TO INDIVIDUALS IN THE ANALYSIS GROUP
FOR ALL YEARS, 1901 THROUGH 1964

Institution	Frequency	Institution	Frequency
Columbia University ^a	415	Pennsylvania State University	65
University of Minnesota	175	Yale University	62
Ohio State University	165	Northwestern University	62
University of Chicago	162	Syracuse University	60
New York University	155	Boston University	59
University of Michigan	139	Cornell University	53
University of Iowa	121	University of Pennsylvania	46
Harvard University	108	Purdue University	45
University of Wisconsin	106	University of Pittsburgh	44
University of Illinois	102	George Peabody College for Teachers	41
Stanford University	95	Wayne State University	40
Indiana University	79	Temple University	37
University of Southern California	76	Western Reserve University	36
University of California at Berkeley	72	University of California at Los Angeles	33
Michigan State University	68	University of Colorado ^b	33
University of Texas	68		

^aIncludes Teachers College. One hundred and seventy-seven (177) respondents listed "Columbia University" on the questionnaire, and 238 listed "Teachers College" or "Teachers College, Columbia University."

^bConstitutes the 31st university on the list, but with the same frequency as number 30.

TABLE X

DISTRIBUTION OF HIGHEST LEVEL DEGREE MAJORS OF INDIVIDUALS GRADUATING FROM
THE OHIO STATE UNIVERSITY DURING THE DECADE, 1952 THROUGH 1961
(N = 71)

Degree Major	Frequency	Degree Major	Frequency
<u>Education</u>		<u>Psychology</u>	
Education - unspecified	4	Psychology - unspecified	19
Adult Education	1	Clinical Psychology	3
Curriculum and Methods	1	Counseling and Guidance	8
Educational Administration	5	Educational Psychology	2
Educational Research	3	Experimental Psychology	1
Guidance and Counseling	3	Industrial and Personnel	2
Philosophy of Education	1	Psychology	
Secondary Education	2	Social Psychology	1
Agricultural Education	1	Total	36
Home Economics	2	%	50.8
Industrial and Technical	1		
Education -		<u>Sociology</u>	
Music Education	1	Sociology - unspecified	5
Reading	1	%	7.0
Teaching-Media Education	1		
Total	27	<u>Other</u>	
%	38.0	Speech	1
		Language, Literature and	1
		Language Arts	
		Pathology	1
		Total	3
		%	4.2

RESEARCH

Selection of Study Samples

The need for a comprehensive source from which study samples of educational researchers might be selected was the original stimulus to the development of the Register. The information categories available through Register data permit the selection of many possible types of such samples. Names and addresses of individuals selected for samples can be obtained on mailing labels and/or print-out sheets. For example, one such service has already been rendered to a research project now being conducted by Lazarsfeld and Sieber, Project OE/# 1974, "The Organization of Educational Research in the United States." A procedural step in this project involves a survey of researchers employed in schools of education. The names and addresses of 1,931 individuals were identified and were supplied both on mailing labels and on a print-out which serves as a master mailing list. Forthcoming projects by Clark, "Study of Roles for Researchers in Education," and Barger, "An Investigation of Factors Influencing the Training and Nurture of Educational Researchers," will also require samples of educational researchers. These samples will be drawn both in terms of occupational settings, and in terms of professional and substantive areas.

Groundwork for Studies of Educational Research and Researchers

Register data may be used to help define important questions and issues related to educational research and researchers. As such, these data may be particularly useful to future research efforts. In this regard, the Clark and Barger projects cited above will make crucial use

of Register data in the very near future. In addition to data available from frequency counts of information categories as presented in Chapter III, additional data are available from subgroup comparisons which have been undertaken. Such comparisons are possible using any one of the information categories listed in the data card formats (see Chapter II) as a dimension along which subgroups may be formed. Analyses have been systematically undertaken utilizing subgroups thus defined from some of the more important information categories. Two such analyses dealing with highest level degree and percent of time devoted to research are presented below as illustrations of the data available.

Highest Degree Subgroups

A number of categories of information are available regarding the educational history of respondents to the Register questionnaire. The type of highest level degree (see Chapter II, page 28) is one of the most important of these categories. Colleges and universities have given a great deal of time and energy to the definition and structuring of various degree programs. Differences in these programs are held to produce genuine differences in the professional viewpoints and activities of those individuals who elect or are assigned to these programs in their undergraduate and graduate training. However, the question may well be raised as to whether or not these programs do in fact have the influence which is intended; and if so, whether this influence is a significant factor in the professional activities and productivity of individuals, especially regarding research. The illustrative Register data presented below will throw some light on this question. These data are derived from highest degree subgroups compared in terms of: A. Educational

Background, B. Professional Identification, C. Employment, including time devoted to research, and D. Research Areas.

A. Educational Background

The educational background of current educational researchers is presented in terms of two criteria: degree majors and types of degrees. Table XI, page 105, summarizes data for highest degree recipients in education, psychology, and other fields. As might be expected, there is a general tendency for previous degree majors to be in the same field as highest degree majors. However, this is hardly surprising since the breakdown as shown is for the broad fields of education and psychology compared with other fields and therefore does not permit comparisons based upon shifts or consistencies in subfields or specialties within these fields.

Table XI also shows a marked increase in proportions of majors in education and in psychology from the bachelor's to the master's level. This trend can perhaps be interpreted as growth toward field specialization in education as well as attraction to the field of individuals with background in other disciplines--a trend which is perhaps common to many other professional fields. To illustrate this point, 55.2% of majors in education at the highest degree level also majored in education at the bachelor's level, while 5.2% of them majored in psychology and 39.6% received degrees in other fields. At the master's level, the proportions of majors in education in contrast to psychology and all other fields are 84.4%, 6.9% and 8.7% respectively. It is also noteworthy that a fair proportion of those persons who received their highest degree in

TABLE XI
BACHELOR'S AND MASTER'S MAJORS:
Percents and Sums Tabulated in Relation to Highest Level Degrees
in Education and Psychology
Total Analysis Group = 3923; Total Responses Vary per Item

Major Field of Highest Degree	Bachelor's Major			Master's Major		
	Education	Psychology	Other Fields	Education	Psychology	Other Fields
Education	55.2 (950)	5.2 (89)	39.6 (683)	84.4 (1411)	6.9 (104)	8.7 (155)
Psychology	23.7 (387)	43.0 (703)	33.3 (545)	21.2 (323)	71.6 (1089)	7.2 (109)

psychology, also majored in education at the bachelor's and master's levels. This trend is probably accounted for largely by highest degree recipients in the subfields of educational psychology, school psychology, or counseling and guidance.

Table XII, page 107, contains data for shifts in previous degree majors for all doctoral recipients in education and psychology. When compared with other doctoral recipients, Ed.D.'s in education show the highest proportion of individuals also majoring in education at the undergraduate and master's levels, followed in turn by the Ph.D.'s in education. In contrast, however, the Ph.D.'s in education have the highest previous concentration in other fields at both the bachelor's and master's levels. Ed.D.'s in psychology also show higher proportions in this regard at the master's level. These tendencies lead to the conclusion that the Ed.D.'s in psychology and the Ph.D.'s in education have generally had more diverse undergraduate and graduate training than either the Ed.D.'s in education or the Ph.D.'s in psychology.

B. Professional Identification

The data on professional identification are presented mainly in terms of primary identification, consistency of identification with highest academic specialty, and the degree of concentration in the major field of identification as contrasted with spread to other fields.

Table XIII, page 108, presents data for primary professional identification based upon first choices from the Sub-Fields List. As might be expected, the Ed.D.'s and M.Ed.'s have the highest proportion of individuals identifying with education. In general, as shown in Table XIV, primary professional identification is highly consistent with highest degree major. Moreover, of the majors in education, Ed.D., M.Ed., and

TABLE XII
 BACHELOR'S AND MASTER'S DEGREES:
 Percents and Sums Tabulated in Relation of Types of Doctoral Degrees
 in Education and Psychology
 Total Analysis Group = 3923; Total Responses Vary per Item

Type and Major Field of Doctoral Degree	Bachelor's Major			Master's Major		
	Education	Psychology	Other Fields	Education	Psychology	Other Fields
Ed.D. Education	57.7 (393)	5.4 (37)	36.9 (251)	84.7 (566)	7.0 (47)	8.3 (55)
Psychology	43.0 (80)	19.4 (36)	37.6 (70)	38.6 (71)	48.4 (89)	13.0 (24)
Ph.D. Education	48.1 (342)	4.9 (35)	46.9 (334)	79.0 (553)	7.6 (53)	13.4 (94)
Psychology	20.4 (250)	44.3 (542)	35.2 (430)	21.8 (246)	70.8 (798)	7.4 (84)

TABLE XIII

PRIMARY FIELDS OF PROFESSIONAL IDENTIFICATION:
 Percents and Sums of Responses in Education and Psychology
 Tabulated in Relation to Types of Highest Level Degrees
 Total Analysis Group = 3923; Total Responses Vary per Item

Type of Highest Degree	Primary Professional Identification	
	Education	Psychology
M. A.	50.7 (185)	41.1 (150)
M. Ed.	83.5 (91)	15.6 (17)
M. S.	61.1 (77)	29.4 (37)
Ed.D.	77.5 (707)	19.4 (177)
Ph.D.	39.3 (901)	50.0 (1146)

TABLE XIV

PRIMARY FIELDS OF PROFESSIONAL IDENTIFICATION:
 Percents and Sums of Responses in Education and Psychology
 Tabulated in Relation to Types of Highest Level Degrees
 Total Analysis Group = 3923; Total Responses Vary per Item

Type and Major Field of Highest Degree	Primary Professional Identification	
	Education	Psychology
M.A.	Education	81.0 (128)
	Psychology	13.3 (21)
M.Ed.	Education	18.4 (28)
	Psychology	79.6 (121)
M.S.	Education	90.8 (79)
	Psychology	8.0 (7)
Ed.D.	Education	88.3 (53)
	Psychology	10.0 (6)
Ph.D.	Education	33.3 (15)
	Psychology	63.2 (28)
Ed.D.	Education	89.9 (622)
	Psychology	8.1 (56)
Ph.D.	Education	36.2 (68)
	Psychology	60.6 (114)
Ph.D.	Education	84.6 (621)
	Psychology	12.3 (90)
Ph.D.	Education	17.8 (224)
	Psychology	80.4 (1012)

M.S. recipients show the highest proportions also primarily identified with education in contrast to Ph.D. and M.A. recipients.

Another interesting feature of Table XIV, page 108, is the fact that Ed.D. recipients in psychology are identified primarily with psychology rather than with education. This is due largely to the interdisciplinary nature of education and, consequently, ambivalence in the identification of social science disciplines within the field. For example, as explained in Chapter III of this report (see pages 54 and 55), a decision was made during the coding of the questionnaire materials to categorize educational psychology as a sub-field within the field of psychology, although it is also a recognized sub-field within the programs of some schools of education. Since the subgroup comparisons have been made on the basis of major fields rather than sub-fields, the results of the analysis would therefore place the Ed.D.'s who majored in educational psychology clearly within the field of psychology. Another instance of ambivalence exists regarding identification with the sub-fields of guidance and counseling (included on the Sub-fields List under the field of education) and counseling and guidance (included under the field of psychology). Here, individuals, especially those trained in schools of education rather than departments of psychology, alternated in their choice of one or the other of these labels, thereby biasing the results in favor of psychology. This limitation should be kept in mind while evaluating the results reported in the rest of this chapter.

Finally, although the relevant data are not provided here, there is a tendency for degree recipients in education to identify decreasingly with education from the primary to the fourth professional field indicated

on the questionnaire; whereas, in contrast, degree recipients in psychology identify increasingly with educational areas. This latter trend is another indication of movement into the field of education of researchers primarily trained in and identified with psychology and having only secondary identification with education.

C. Current Employment

First Employment Field. The respondents to the questionnaire were requested to indicate their current primary and secondary fields of employment. Table XV, page 111, presents data for fields of primary employment principal position, and primary professional identification of doctoral recipients in education and psychology. Principal employment is generally consistent with major field of highest degree and primary professional identification. It is noteworthy however, that, for highest degree recipients in psychology, irrespective of degree type, employment in education is proportionately higher than identification in education.

Principal Position. As discussed above, the respondents were asked to indicate their fields of employment. By contrast, the major field of the immediate unit or subunit of employment was coded from the information concerning the principal position of current employment provided by the respondents. It was considered possible that persons employed in the field of education for skills and training received from other fields might perceive their fields of employment in a manner which differed with the overt field orientations of the institutional units in which they are employed. The proportions presented in Table XV clearly support this expectation. Apparently, the field of the principal position reflects the setting of employment, while, in providing their primary field of employment,

TABLE XV

PRIMARY FIELDS OF PROFESSIONAL IDENTIFICATION,
CURRENT EMPLOYMENT AND PRINCIPAL POSITION:

Percents and Sums of Responses in Education and Psychology
Tabulated in Relation to Types of Doctoral Degrees
in Education and Psychology

Total Analysis Group = 3923; Total Responses Vary per Item

Type and Major Field of Highest Degree	Primary Identification		Current Employment		Principal Position		
	Education	Psychology	Education	Psychology	Education	Psychology	
Ed.D.	Education	89.9 (622)	8.1 (56)	89.5 (613)	7.6 (52)	93.1 (645)	4.9 (34)
	Psychology	36.2 (68)	60.6 (114)	43.2 (80)	55.7 (103)	72.7 (136)	26.2 (49)
Ph.D.	Education	84.6 (621)	12.3 (90)	84.8 (611)	11.1 (80)	93.1 (677)	4.0 (29)
	Psychology	7.8 (224)	80.4 (1012)	25.0 (310)	72.4 (900)	32.4 (398)	8.7 (398)

respondents for the most part were indicating the field of professional competence for which they considered themselves employed. In this regard, it is of special interest that among the sample of educational researchers, degree recipients in psychology and sociology generally held principal positions in the field of education, wherein they are employed specifically for their training and experience. This provides further indication of a general movement into the field of education by researchers with predominant orientations in behavioral and social science fields. Nevertheless, degree majors in education account for the largest proportions of the total sample of educational researchers also employed in education.

Types of institutions. Among the nine types of institutions coded, the principal differences occurred between employment in colleges and universities as against employment in school systems. In terms of general comparisons between the two degree levels represented in the total analysis group, as shown in Table XVI, page 113, master's degree recipients irrespective of field major show the highest proportions employed in school systems; while doctoral recipients have the highest employment in colleges and universities. In addition, there are higher proportions of master's degree recipients than doctoral recipients employed by governmental agencies. On the doctoral level, the Ph.D.'s in education show the highest employment in colleges and universities compared with all Ed.D.'s and the Ph.D.'s in psychology. While the Ed.D.'s have higher employment in school systems than the Ph.D.'s, there are only slight differences among the doctoral degree subgroups in terms of proportions employed by governmental agencies.

TABLE XVI

INSTITUTIONS OF EMPLOYMENT:
 Percents and Sums of Responses Tabulated in Relation to Types
 of Highest Level Degrees in Education and Psychology
 Total Analysis Group = 3923; Total Responses Vary per Item

Type and Major Field of Highest Degree	Institutions of Employment		
	Colleges and Universities	Governmental Agencies	School Systems
Education	30.5 (48)	12.7 (20)	47.7 (75)
M. A. Psychology	28.3 (41)	13.1 (19)	38.6 (56)
M. Ed.	24.4 (21)	12.8 (11)	56.9 (49)
Education	18.0 (11)	14.8 (9)	50.8 (31)
M.S. Psychology	20.5 (9)	9.1 (4)	54.6 (24)
Education	68.7 (474)	8.3 (57)	17.8 (123)
Ed.D. Psychology	67.0 (124)	7.1 (13)	17.9 (33)
Education	76.8 (557)	9.2 (67)	9.2 (67)
Ph.D. Psychology	69.8 (855)	7.6 (93)	7.1 (88)

Institutional Units of Employment. Data in Table XVII, page 115, indicate that master's recipients are generally employed in administrative units, while doctoral recipients (especially Ph.D.'s in education) are generally employed in teaching units with secondary proportions employed in administrative units. The only exception to this statement concerns the Ed.D.'s in education who show slightly higher proportions of employment in administrative units. Table XVII also shows a generalized relationship between field (rather than type of degree) and unit of employment. On the master's level, although all groups are principally employed in administrative units, researchers who majored in education account consistently for the highest proportions in administrative and teaching units. In contrast, psychology majors account for the highest proportions employed in research and service units. On the doctoral level, contrasts just cited between education and psychology majors are generally repeated, the only exception being the Ed.D.'s in education which show a slightly lower proportion in teaching than do the doctoral subgroups in psychology. Among those employed in teaching units, the Ph.D.'s in education have the highest proportion in contrast to all Ed.D.'s and the Ph.D.'s in psychology. As may be inferred from Table XVI, these teaching units are mainly within institutions of higher education rather than lower school systems.

Status Levels. Status differences of highest degree recipients in education and psychology are presented in Table XVIII, page 116. According to these data, the principal differences occur between field majors rather than types of degrees attained at the master's level. On the doctoral level, although all degree subgroups have higher proportions employed as major staff, the main difference appears to be between the Ed.D.'s in

TABLE VIII

INSTITUTIONAL units of employment:
 Percents and Sums of Responses tabulated in Relation to Types
 of Highest Level Degrees in Education and Psychology
 Total Analysis Group = 3923. Total Responses Vary per row

Type and Major Field of Highest Degree	Institutional units of Employment				
	Administrative	Research	Service	Teaching	
M.A.	Education	64.6 (102)	11.4 (18)	11.4 (18)	12.7 (20)
	Psychology	41.1 (60)	12.3 (18)	39.8 (58)	6.8 (10)
M.Ed.		58.1 (50)	9.3 (8)	16.3 (14)	16.3 (14)
M.S.	Education	55.7 (34)	11.5 (7)	13.1 (8)	19.7 (12)
	Psychology	40.9 (18)	18.2 (8)	34.1 (15)	6.8 (3)
Ed.D.	Education	47.4 (327)	4.1 (28)	3.3 (23)	45.2 (312)
	Psychology	34.1 (63)	5.9 (11)	12.4 (23)	47.6 (88)
Ph.D.	Education	38.3 (279)	4.4 (32)	3.3 (24)	60.0 (393)
	Psychology	32.4 (398)	8.7 (108)	11.3 (139)	47.6 (585)

TABLE XVIII

STATUS LEVELS OF CURRENT EMPLOYMENT:
 Percents and Sums of Responses Tabulated in Relation to Types
 of Highest Level Degrees in Education and Psychology
 Total Analysis Group = 3923; Total Responses Vary per Item

Type and Major Field of Highest Degree	Status Levels	
	Executive	Major Staff
H.A. Education	65.1 (103)	31.6 (50)
H.A. Psychology	40.0 (60)	53.3 (80)
H.Ed. Education	52.8 (46)	39.1 (34)
H.S. Education	59.0 (36)	34.4 (21)
H.S. Psychology	38.6 (17)	54.6 (24)
Ed.D. Education	47.8 (331)	51.4 (356)
Ed.D. Psychology	36.2 (68)	61.7 (116)
Ph.D. Education	38.1 (280)	60.2 (441)
Ph.D. Psychology	34.1 (428)	62.6 (787)

education (having the highest proportion of executives) as compared with the Ed.D.'s in psychology and the Ph.D.'s in education and psychology (having the highest proportions of major staff). These results together with those presented above for types of institutions and units of employment seem to render questionable the usual assumptions of major differences between Ed.D.'s and Ph.D.'s, at least in terms of these criteria of employment. Real differences might in fact be found to exist between groups of individuals who have attained different types of degrees, if general populations of persons receiving these degrees were involved. However, sharing a common interest in research may tend to reduce differences between individuals, especially within the same academic field.

Percent of Time Devoted to Professional Activities. Without distinguishing among degree groups or types of degrees attained, degree recipients in education, as shown in Table XIX, page 118, reported the highest median percent of time devoted to administration. By contrast, degree recipients in psychology reported highest median percent of time devoted to other activities. The "other" activities category was used mainly by individuals in psychology whose main professional activities include guidance, counseling, or therapy, and by administrative personnel to indicate time devoted to service and miscellaneous duties. The highest median percent of research time is shown by researchers who majored in sociology, while recipients of degrees in education and psychology do not appear to differ to any appreciable extent. The three degree groups are fairly comparable in regard to teaching time.

TABLE XIX

PERCENT OF TIME DEVOTED TO PROFESSIONAL ACTIVITIES:
 Median Percents and Sums Tabulated in Relation to Highest Level Degrees
 in Education, Psychology, and Sociology
 Total Analysis Group = 3923; Total Responses Vary per Item

Major Field of Highest Degree	Professional Activities			
	Administration	Research	Teaching	Other
Education	45.9 (1251)	24.6 (1552)	36.7 (1150)	28.8 (764)
Psychology	27.8 (1194)	27.1 (1479)	33.2 (1155)	37.1 (799)
Sociology	22.5 (112)	47.9 (169)	39.0 (140)	23.1 (46)

TABLE XX

PERCENT OF TIME DEVOTED TO PROFESSIONAL ACTIVITIES:
 Median Percents and Sums Tabulated in Relation to Types of Doctoral Degrees
 in Education, Psychology, and Sociology
 Total Analysis Group = 3923; Total Responses Vary per Item

Type and Major Field of Doctoral Degree	Professional Activities			
	Administration	Research	Teaching	Other
Education	41.3 (520)	23.6 (591)	38.8 (484)	27.2 (318)
Ed.D.				
Psychology	34.5 (123)	23.4 (165)	46.8 (129)	37.4 (93)
Education	42.2 (496)	25.8 (653)	39.1 (533)	26.7 (302)
Ph.D.				
Psychology	26.6 (915)	28.4 (1130)	33.7 (937)	32.6 (574)
Sociology	24.8 (98)	45.8 (148)	39.5 (128)	21.7 (38)

An examination of the time distributions for doctoral recipients only (See Table XX, page 118) reveals the following tendencies:

1. All doctoral recipients in education report the highest median administration time. The Ph.D.'s in psychology and sociology are almost equally low in this respect, while the Ed.D.'s in psychology appear to occupy a midway position among the groups.
2. The highest amount of time given to research is shown by Ph.D.'s in sociology. By contrast, the other doctoral groups are similarly low in research time.
3. The Ed.D.'s in psychology reported the highest amount of teaching time. There appears to be little difference among the other groups, though the Ph.D.'s in psychology show the lowest median percent of teaching time.
4. As might be expected, the Ed.D.'s in psychology and (to a lesser extent) the Ph.D.'s in psychology show the highest median time engaged in other activities, usually guidance, counseling, therapy, etc.
5. Finally, in terms of the distribution of their time among the various professional activities, Table XX also reveals that the Ph.D.'s in psychology are rather evenly distributed, while the other degree groups show a preoccupation with one or another of the activities.

D. Present Research Areas

The questionnaire provided space for six or more areas in which the researcher is currently active or in which he has engaged during past years. No requirement was specified for indicating the areas in the order of their importance to the researcher in terms of the degree of his preoccupation with each area. In order to discover the more or less currently predominant research interests of educational researchers, total responses and percentages were computed for all of the major topics on the Research Areas List. Table XXI, page 120, shows proportion of responses for the five highest indicated areas for researchers who received their doctor's degree in education and psychology. According

TABLE XXI

PRESENT RESEARCH AREAS:
 Percents and Sums of Responses Tabulated in Relation to Types
 of Doctoral Degrees in Education and Psychology

Type and Major Field of Doctoral Degree	Present Research Areas				
	Administration & Organization	Curriculum	Guidance & Counseling/ School Psych.	Teaching- Learning Process	Testing & Measure- ment
Education Ed.D.	21.3 (381)	23.4 (418)	8.8 (158)	22.1 (396)	7.1 (127)
Psychology	7.9 (40)	11.4 (58)	19.1 (97)	29.1 (148)	17.5 (89)
Education Ph.D.	17.8 (335)	23.4 (441)	7.7 (144)	25.8 (487)	8.8 (165)
Psychology	5.7 (190)	6.9 (233)	14.8 (494)	39.8 (1327)	21.3 (710)

to these data, the highest interest in administration and organization is shown by the Ed.D.'s in education. The Ed.D.'s and Ph.D.'s in education show the highest interest in curriculum research. The Ed.D.'s in psychology have the highest proportion of researchers in the area of guidance and counseling; while the Ph.D.'s in psychology appear to concentrate in the area of the teaching-learning process and in testing and measurement.

Finally, the data suggest that academic field orientation, irrespective of type of degree received at the highest level, is associated with differences in current research interests. In general, degree recipients in education are preoccupied with curriculum and administration-organization research; while, by contrast, degree recipients in psychology show predominant interest in the teaching-learning process, testing and measurement, and guidance and counseling, in that order.

E. Summary and Conclusions: Highest Degree Subgroup Comparisons

Highest degree subgroups were compared on the basis of educational background, professional identification, employment including research time, and research areas. Relative to educational background, data presented indicated growth toward field specialization in education as well as attraction to the field of individuals with diverse academic backgrounds. It has been suggested that this trend is perhaps common to many other professional fields. Notwithstanding, such a finding can lead to some speculations regarding the training of potential researchers in education. For example, according to the data, over 50% of the researchers who finally specialize in education at the doctoral level also focus their training toward education on the undergraduate level.

Consequently, it should be possible to attract and stimulate potential educational researchers quite early in their academic training and provide them with experiences which can eventuate in upgrading research productivity.

A high degree of consistency of professional identification with academic training was also indicated. The problem of ambivalence in the identification of social science disciplines within the field of education was suggested as particularly relevant to the sub-fields of guidance and counseling, educational psychology, and school psychology. This problem points to the need for professional clarification of the fields involved. The data also revealed a tendency for individuals primarily identified with psychology and social science fields to have a secondary identification in the field of education. This is hardly surprising since many educational questions are interdisciplinary by nature and are thereby of interest to many other professional fields.

In spite of the fact that some researchers in education are from other fields (notably, behavioral and social science fields), the data revealed that the major portion of the analysis group are principally employed in the field of education. This is perhaps a favorable finding because it suggests that the major stimulus for research on educational questions is provided by the field itself, which attracts individuals from other fields and utilizes their specific training and experiences.

Data concerning other aspects of employment led to subgroup differences based both on types of degrees and major field associations. In general, these comparisons produced more differences based upon field associations than upon type of degree. Frequently, differences were not

between Ed.D.'s and Ph.D.'s, for example, but between education and psychology majors. This suggests that there are similarities within general field orientations which cut across different types of degrees. It thus seems clear that improvement in graduate training for research in education will probably be affected less by increased emphasis upon one or another of the already existing degree programs, than by a systematic upgrading of other factors which influence research.

Percent of Time Devoted to Research Subgroups

Data concerning percent of time devoted to research may be cited as a second illustration of the manner in which the Register may contribute to the definition of important questions and issues regarding educational research and researchers. The results reported below are based upon indications by the analysis group of the amount of time devoted to research as compared with time given to other professional activities, notably administration, teaching and service. Ten time intervals or levels were derived and attempts were made to compare researchers varying in amount of research time on the basis of the following educational background and current professional characteristics: A. Academic Degrees and Degree Majors; B. Professional Identification; C. Employment; and D. Research Areas.

A. Academic Degrees and Degree Majors

Highest degree level. With regard to highest degree attained, researchers at all research time levels received predominantly doctoral degrees. Those individuals holding a master's degree, however, either devote less than 10% time, or almost full-time (80-100%) to research.

The findings concerning major field of highest degree in relation to percent of time devoted to research are presented in Table XXII,

page 125. These data indicate that individuals who majored in education account for the highest proportions of researchers devoting 39% or less of their time to research, whereas individuals majoring in psychology account for the highest proportions of researchers who devote 40% or more of their time to research.

Bachelor's level. Though the relevant data are not provided here, no differentiation was revealed among the various research time levels in terms of the types of degrees received at the bachelor's level. Personnel at all time levels, especially those devoting 70-100% time to research, received predominantly Bachelor of Arts degrees, with important secondary proportions having received Bachelor of Science degrees. In contrast, variation in research time does appear to be associated with difference in field major at the bachelor's level. As shown in Table XXIII, page 126, researchers who give up to 70% time to research tend to have majored in education; while researchers who reported 70-90% research time majored in psychology. Personnel engaged in full-time research (i.e. 90-100%) majored equally in education and psychology.

Master's level. The tendencies already noted for bachelor's degrees are repeated in comparisons of both the type and field major of degrees at the master's level. Personnel at all research time levels received primarily Master of Arts degrees, with secondary proportions having received Master of Science or Master of Education degrees, in that order. Table XXIV, page 127, presents results for percent of time devoted to research in relation to major field of master's degree. Personnel presently devoting up to 70% time to research tend to have

TABLE XXII

MAJOR FIELDS OF HIGHEST LEVEL DEGREES:
 Percents and Sums of Responses in Education and Psychology
 Tabulated in Relation to Percent of Time Devoted to Research
 Total Analysis Group = 3923; Total Responses Vary per Item

Percent of Time Devoted to Research	Major Fields of Highest Degree	
	Education	Psychology
0 - 9	51.3 (179)	44.7 (156)
10 - 19	50.6 (404)	42.3 (338)
20 - 29	48.4 (375)	41.8 (323)
30 - 39	47.7 (156)	40.7 (133)
40 - 49	39.0 (92)	46.6 (110)
50 - 59	42.8 (161)	41.8 (157)
60 - 69	39.3 (48)	50.0 (61)
70 - 79	31.2 (43)	52.9 (73)
80 - 89	21.2 (21)	43.4 (43)
90 - 100	40.6 (73)	47.2 (85)

TABLE XXIII

MAJOR FIELDS OF BACHELOR'S DEGREES:
 Percents and Sums of Responses in Education and Psychology
 Tabulated in Relation to Percent of Time Devoted to Research
 Total Analysis Group = 3923; Total Responses Vary per Item

Percent of Time Devoted to Research	Major Fields of Bachelor's Degrees	
	Education	Psychology
0 - 9	42.6 (145)	20.0 (68)
10 - 19	40.7 (318)	19.4 (152)
20 - 29	40.2 (303)	18.4 (138)
30 - 39	40.4 (129)	24.5 (78)
40 - 49	33.9 (78)	23.1 (53)
50 - 59	35.4 (127)	20.0 (72)
60 - 69	33.3 (41)	29.3 (36)
70 - 79	20.6 (28)	33.8 (46)
80 - 89	19.6 (18)	27.1 (25)
90 - 100	29.7 (52)	28.6 (50)

TABLE XXIV

MAJOR FIELDS OF MASTER'S DEGREES:
 Percents and Sums of Responses in Education and Psychology
 Tabulated in Relation to Percent of Time Devoted to Research
 Total Analysis Group = 3923; Total Responses Vary per Item

Percent of Time Devoted to Research	Major Fields of Master's Degrees	
	Education	Psychology
0 - 9	55.1 (184)	35.0 (117)
10 - 19	55.8 (419)	33.1 (249)
20 - 29	52.6 (376)	33.1 (237)
30 - 39	51.9 (154)	32.9 (98)
40 - 49	44.9 (92)	35.1 (72)
50 - 59	47.0 (157)	29.9 (100)
60 - 69	43.6 (48)	40.9 (45)
70 - 79	31.7 (39)	48.8 (60)
80 - 89	32.0 (25)	41.0 (32)
90 - 100	44.5 (73)	41.5 (68)

majoring in education, while those at the 70-90% levels majored in psychology. At the 90-100% research time level, the trend once more indicates higher proportions of majors in education at the master's level.

B. Professional Identification

The data relevant to field of professional identification are presented in Table XXV, page 129. With the exception of individuals at the 80-89% levels, higher proportions of the analysis group at all research time levels are currently identified with the field of education. This is especially true for personnel devoting less than 30% of their time to research.

C. Employment

Primary Field of Current Employment. The primary field of employment, as shown in Table XXVI, page 130, is predominantly education for personnel at all research time levels. There is, however, a steady decrease in proportions employed in the field of education in the first half of the table up to the 50% time level.

Secondary Field of Current Employment. Table XXVII, page 131, presents comparative data for the secondary field of current employment. Those individuals spending up to 70% time in research tend to be secondarily employed in education. There is virtually no difference at the 70-90% level in the proportions employed in education or psychology as a secondary field. Higher proportions of individuals at the 90-100% research time level tend to be secondarily employed in the field of psychology. Moreover, there is a definitely decreasing tendency to be employed in the field of education among those devoting more than 70% of their time to research.

TABLE XXV

MAJOR FIELDS OF PROFESSIONAL IDENTIFICATION:
 Percents and Sums of Responses in Education and Psychology
 Tabulated in Relation to Percent of Time Devoted to Research
 Total Analysis Group - 3923; Total Responses Vary per item

Percent of Time Devoted to Research	Major Fields of Professional Identification	
	Education	Psychology
0 - 9	53.7 (189)	42.6 (150)
10 - 19	55.0 (444)	38.6 (312)
20 - 29	53.5 (428)	37.7 (297)
30 - 39	50.3 (168)	39.2 (131)
40 - 49	46.0 (110)	43.1 (103)
50 - 59	52.0 (199)	34.3 (131)
60 - 69	46.0 (58)	41.3 (52)
70 - 79	42.9 (60)	42.1 (59)
80 - 89	37.6 (38)	40.6 (41)
90 - 100	48.4 (88)	40.6 (74)

TABLE XXVI

PRIMARY FIELDS OF CURRENT EMPLOYMENT:
 Percents and Sums of Responses in Education and Psychology
 Tabulated in Relation to Percent of Time Devoted to Research
 Total Analysis Group = 3923; Total Responses Vary per Item

Percent of Time Devoted to Research	Primary Fields of Current Employment	
	Education	Psychology
0 - 9	59.3 (208)	36.7 (129)
10 - 19	58.3 (468)	35.2 (283)
20 - 29	57.7 (451)	34.1 (266)
30 - 39	55.7 (186)	33.2 (111)
40 - 49	48.7 (116)	40.0 (95)
50 - 59	55.6 (210)	32.0 (121)
60 - 69	49.6 (62)	38.4 (48)
70 - 79	50.7 (71)	37.2 (52)
80 - 89	46.0 (46)	35.0 (35)
90 - 100	54.9 (100)	36.3 (66)

TABLE XXVII

SECONDARY FIELDS OF CURRENT EMPLOYMENT:
 Percents and Sums of Responses in Education and Psychology
 Tabulated in Relation to Percent of Time Devoted to Research
 Total Analysis Group = 3923; Total Responses Vary per Item

Percent of Time Devoted to Research	Secondary Fields of Current Employment	
	Education	Psychology
0 - 9	53.9 (138)	40.6 (104)
10 - 19	57.8 (350)	36.1 (219)
20 - 29	53.4 (333)	38.1 (238)
30 - 39	49.1 (132)	39.7 (107)
40 - 49	51.0 (98)	35.5 (68)
50 - 59	53.7 (158)	31.0 (91)
60 - 69	48.1 (50)	36.5 (38)
70 - 79	41.1 (46)	41.0 (46)
80 - 89	39.2 (31)	39.3 (31)
90 - 100	37.4 (43)	47.8 (55)

Status. Table XXVIII, page 133, presents results of comparisons among researchers at various time levels in terms of the status of their principal position of current employment. The analysis differentiated mainly between executives and major staff. In general, as time devoted to research increases, there is a steady decrease in the number of executives who devote time to research, with a corresponding increase in the number of major staff who devote time to research. In fact, individuals with major staff positions are higher at all research time levels except 0-9%.

Type of Institution. The data pertaining to type of institution of employment are not presented here. However, as might be expected, personnel at all research time levels are primarily employed in colleges and universities. It is interesting to report that there is an increase in proportions employed in these institutions up to the 39% time level; after that, as time devoted to research increases, the proportions employed in colleges and universities decreases with noticeable increases in the proportion of individuals employed by governmental agencies.

Source of Control. Up to 80% research time is generally associated with employment in state-controlled institutions; whereas, full-time research tends to be associated with employment in privately controlled institutions.

Type of Employment Units. Table XXIX, page 134, summarizes the data pertaining to the type of units in which researchers varying in reported research time are currently employed. Personnel who reported less than 20% research time are employed for the most part in administrative units. Those individuals who reported from 20-80% research time are

TABLE XXVIII

STATUS LEVELS OF PRINCIPAL POSITION:
 Percents and Sums of Responses at Executive and Major Staff Levels
 Tabulated in Relation to Percent of Time Devoted to Research
 Total Analysis Group = 3923; Total Responses Vary per Item

Percent of Time Devoted to Research	Status Levels of Principal Position	
	Executive	Major Staff
0 - 9	45.0 (158)	43.9 (154)
10 - 19	39.5 (319)	51.5 (416)
20 - 29	32.5 (255)	60.4 (474)
30 - 39	28.4 (95)	65.6 (219)
40 - 49	24.5 (58)	67.5 (160)
50 - 59	29.0 (111)	64.1 (245)
60 - 69	36.5 (46)	57.9 (73)
70 - 79	26.4 (37)	63.5 (89)
80 - 89	30.0 (30)	62.0 (62)
90 - 100	23.7 (43)	59.9 (109)

TABLE XXIX

INSTITUTIONAL UNITS OF EMPLOYMENT:
 Percents and Sums of Responses for Administrative, Research, Service
 and Teaching Units Tabulated in Relation to Percent of Time Devoted to Research
 Total Analysis Group = 3923; Total Responses Vary per Item

Percent of Time Devoted to Research	Institutional Units of Employment			
	Administrative	Research	Service	Teaching
0 - 9	55.6 (194)	1.4 (5)	16.9 (59)	26.1 (91)
10 - 19	49.0 (394)	1.6 (13)	9.6 (77)	39.8 (320)
20 - 29	37.5 (293)	2.1 (17)	9.1 (71)	51.3 (401)
30 - 39	33.0 (110)	3.3 (11)	4.2 (14)	59.5 (198)
40 - 49	28.4 (67)	7.2 (17)	5.5 (13)	58.9 (139)
50 - 59	29.7 (112)	10.9 (41)	5.8 (22)	53.6 (202)
60 - 69	36.5 (46)	15.9 (20)	4.7 (6)	42.9 (54)
70 - 79	33.1 (46)	19.4 (27)	5.1 (7)	42.4 (59)
80 - 89	35.0 (35)	34.0 (34)	5.0 (5)	26.0 (26)
90 - 100	24.3 (44)	58.0 (105)	8.9 (16)	8.8 (16)

employed predominantly in teaching units. Researchers at the 80-90% time level tend to be employed equally in administrative and research units. However, when the number of persons indicating 80-100% research time is combined, full-time research appears to be associated with employment in research units.

Other Professional Activities. The results of a comparison of varying amounts of research time in relation to time devoted to other professional activities are shown in Table XXX, page 136. In general, there is a consistent tendency for increases in research time to be related to decreases in mean time devoted to administration and other professional activities. There is an initial increase in teaching time with up to 30% increase in research time. However, from 30-100% research time, teaching time follows the generally decreasing trend already noted for administration and other professional activities.

D. Research Areas. With regard to areas of research, no consistent patterns are suggested by the data. Notwithstanding, an analysis of the time distribution relevant to responses in each major area revealed some differences in median research time. Responses in the area of Educational Research as an activity were associated with the highest median research time (39.4), followed by research on Administration and the Teaching Learning Process (29.2 and 29.0, respectively), research on Testing and Measurement (28.4), Personnel research (26.7), Curriculum research (25.4), and research on areas of Guidance and Counseling (23.1). Generally, it would appear that the area of research is not crucially related to the amount of time one is able to devote to research.

TABLE XXX

PERCENT OF TIME DEVOTED TO PROFESSIONAL ACTIVITIES:
 Percents and Sums of Responses for Administration, Teaching, and Other
 Activities Tabulated in Relation to Percent of Time Devoted to Research
 Total Analysis Group = 3923; Total Responses Vary per Item

Percent of Time Devoted to Research	Median Percents of Time Devoted to Professional Activities		
	Administration	Teaching	Other
0 - 9	58.0 (295)	22.4 (244)	45.4 (209)
10 - 19	48.6 (679)	37.4 (576)	35.7 (459)
20 - 29	38.4 (592)	46.0 (611)	28.2 (373)
30 - 39	32.7 (259)	37.3 (284)	30.2 (156)
40 - 49	24.1 (91)	42.0 (193)	19.5 (98)
50 - 59	27.2 (217)	39.7 (259)	29.0 (109)
60 - 69	19.9 (92)	26.7 (89)	22.0 (45)
70 - 79	20.1 (97)	22.3 (94)	18.3 (24)
80 - 89	16.5 (77)	13.5 (45)	14.0 (25)
90 - 100	13.2 (39)	10.4 (20)	12.3 (10)

E. Summary and Conclusions: Percent of Time Devoted to Research Subgroups

Comparisons were made of researchers varying in the amount of time they devote to research in order to determine differences, if any, in their academic training, professional identification, employment, and areas of research.

The findings concerning academic background indicated that the principal differences in research time were between field majors rather than types of degrees. Data for the bachelor's, master's, and highest degree levels showed consistently that individuals who majored in education currently devote less time to research than those who majored in psychology.

In terms of professional identification, higher proportions of the analysis group at all research time levels tended to be identified primarily with the field of education. This tendency to be identified with education was particularly marked at the lower research time levels indicating again that educators tend to devote less time to research than do psychologists.

The major portion of the analysis group, irrespective of varying amounts of research time, were primarily employed in the field of education. Data for the second field of employment, however, indicated a tendency for full-time research to be associated with secondary employment in psychology.

Some particularly interesting findings were presented in relation to several aspects of employment. To begin with, variation in research time was found to be associated with employment status differences. When comparing executive and major staff status levels, researchers classified as major staff account for the highest proportions at all time

levels except 0-9%. This finding was reinforced by data on type of employment units. It was shown that small amounts of research time were reported by individuals employed for the most part by administrative units. Research time ranging from 20-80% was reported mainly by individuals predominantly employed in teaching units; while full-time research was indicated by individuals principally employed in research units.

Data pertaining to source of control and type of institution of employment showed that less than 80% research time is generally associated with employment by state-controlled colleges and universities; whereas, full-time research appears to be related to privately controlled institutions, again mainly colleges and universities.

The results of comparisons of varying amounts of research time in relation to time devoted to other activities showed a consistently negative association. It seems logical that the more one is involved in other (perhaps equally demanding) professional activities, the less time one has for research.

No consistent patterns were suggested by the data on research areas. Nonetheless, slight differences in median research time were reported for the five most frequently reported areas.

In general two major kinds of distinctions can be made from the results presented in this discussion on research time. Firstly, a distinction can be made among individuals varying in research time in terms of field orientation. The data for both academic training and professional identification indicated a generalized tendency for individuals with an orientation toward psychology or sociology to do more research than those in education. Secondly, a distinction can be made between

Individuals who devote varying amounts of time to research in terms of several aspects of the institutions in which they are employed. These distinctions point to the existence of field and employment conditions which possibly inhibit or maximize research. Consequently, such conditions should be given consideration in any attempt to enhance research productivity in education.

The discussions above concerning highest degree subgroups and percent of time devoted to research, indicate that Register data can be used to help define questions important to further studies of educational research and researchers. Discussions of data from other subgroup comparisons, such as those based upon professional identification, types of institutions and institutional units of employment, fields of employment, research areas, etc., could undoubtedly lead to the definition of additional questions and issues.

FINAL STATEMENTS, CHAPTER IV

The data and discussion presented in this chapter indicate that the Register will serve the field of education in ways which are both useful and timely. With the lessons learned in the course of the present project, and with the revisions which are now possible in the questionnaire and accompanying materials prior to their next circulation, the continued utility of the Register should not only be assured, but enhanced.